

## Sandstone

Commercial sandstone quarries and mines<sup>1</sup> had an output in 1939 valued at \$4,445,000 at points of production. These quarries and mines produced 3,295,000 short tons of sandstone including 2,538,000 tons of crushed and broken stone and approximately 757,000 tons of rough blocks or slabs.

The industry employed an average of 1,737 wage earners who worked a total of 3,131,000 man-hours during 1939. In addition, in October of the year there were 132 salaried employees and 47 proprietors and firm members. These statistics do not cover the activities of dimension-stone dressing plants engaged in cutting, shaping, polishing, and otherwise finishing the rough blocks or slabs; statistics for these operations are included in the summaries for stone-manufacturing industries.

Sandstone quarries and mines covered by the 1939 Census of Mineral Industries paid \$1,850,000 to wage earners during the year—an average of 53 cents per man-hour. Salaried employees were paid a total of \$230,000. The cost of supplies and materials consumed during the year was \$742,000; \$180,000 was spent for fuel; and \$137,000 for purchased electric energy. The amount spent for work done on contract by other concerns was \$30,000. These expenses totaled \$2,969,000. The cost of new buildings, major repairs to old structures, and machinery and equipment erected or installed during the year amounted to \$115,000.

The 3,295,000 short tons of sandstone produced in 1939 was about 34 percent less than the quantity reported in 1929, and the quarry value, \$4,445,000, was almost 59 percent lower.<sup>2</sup> However, the output of sandstone by "noncommercial" producers, who were not canvassed by the Bureau of the Census, increased enormously during the past decade. According to the United States Bureau of Mines, the quantity of sandstone (mostly

crushed and broken stone) quarried or mined by such producers increased from 1,432,000 short tons in 1929 to 6,205,000 short tons in 1939.

Of the total quantity of crushed and broken sandstone reported, 2,359,000 short tons were produced from open quarries, with an average output per man-hour of 1.3 tons. The remaining 164,000 short tons of crushed and broken sandstone were produced from underground mines, all located in Pennsylvania, with a somewhat higher average output per man-hour of 1.5 tons. All of the rough sandstone blocks and slabs reported were obtained from open quarries. These quarries employed an average of 603 wage earners who worked a total of 1,141,194 man-hours. The average output per man-hour at these quarries was 0.68 ton.

Sandstone was produced in 1939 from operations located in 23 States. Crushed and broken sandstone was produced in 16 States, Pennsylvania accounting for 48 percent and California for 15 percent of the total production. Dimension sandstone was produced from operations scattered over 20 States, with Ohio, Oregon, and West Virginia producing 80 percent of the total output.

The number of wage earners engaged in the production of sandstone fluctuated during the year from a low level of 1,224 wage earners in February to a peak of 2,027 wage earners in October. In general, the number of wage earners was smallest in the months of December, January, February, and March, and largest in the summer and fall months.

Sandstone quarries producing dimension stone were active for the equivalent of 223 full days during the year, 41 days more than quarries and mines producing crushed and broken sandstone. Virtually all sandstone quarries and mines operated one shift per day, the average shift being 8 hours long.

Power equipment available for use at sandstone quarries and mines at the end of the year had an aggregate rated capacity of 35,502 horsepower. Of this total, 80 percent represented that used for driving fixed or stationary equipment such as crushers, screens, air compressors, and mine hoists. The remaining horsepower was used for driving mobile equipment such as power shovels, locomotives, trucks, tractors, and churn drills. The total horsepower available per wage earner in 1939 was 20, compared with 11 in 1929 and 8 in 1919.

<sup>1</sup> The statistics presented in this report cover sandstone quarries and mines whose production enters into the usual channels of commerce. Thus the figures exclude quarries and mines operated by governmental agencies, public utilities, and construction companies or contractors producing stone wholly for their own use or on contract for a government agency.

<sup>2</sup> The quantity and value figures given in this report represent sandstone produced during the year. They differ somewhat from available figures representing the quantity and value of sandstone sold or used by producers, since a considerable amount of dimension sandstone quarried in a given year is usually left to "season" before it is sold or used.

TABLE 88.—PRINCIPAL STATISTICS FOR THE SANDSTONE INDUSTRY IN THE UNITED STATES: 1939, 1929, 1919, 1909, 1902, 1889, AND 1880<sup>1</sup>

(For producing operations only)

ITEM	1939	1929	1919	1909	1902	1889	1880
Number of operating companies <sup>2</sup> -----	117	(3)	(3)	1,172	1,236	(3)	(3)
Number of quarries and mines-----	127	245	305	1,326	1,336	1,020	502
Production of sandstone (tons of 2,000 pounds)-----	3,295,036	4,959,789	5,287,000	(3)	(3)	(3)	(3)
Value of all products-----	\$4,444,634	\$10,957,119	\$11,056,607	\$9,521,654	\$11,035,545	\$12,505,663	\$4,780,391
Number of persons engaged, total-----	1,916	4,148	5,103	11,960	11,702	18,718	9,567
Wage earners (average for the year, including inactive periods)-----	1,737	3,589	4,453	9,974	10,612	7,177	9,587
Salaried employees-----	132	467	454	623	690	1,186	(3)
Proprietors and firm members-----	47	92	196	1,365	(3)	(3)	(3)
Performing manual labor-----	19	(3)	60	771	(3)	(3)	(3)
Principal expenses designated below, total-----	\$2,969,339	\$7,727,189	\$8,127,028	\$6,962,074	\$8,400,729	\$8,097,003	(3)
Wages-----	\$1,650,587	\$4,305,844	\$4,614,520	\$4,842,499	\$6,315,765	\$6,785,214	(3)
Salaries-----	\$229,990	\$1,096,238	\$885,661	\$605,093	\$746,337	(3)	(3)
Supplies and materials-----	\$741,907	\$1,597,387	\$1,722,617	\$1,057,430	\$1,337,526	\$1,311,739	\$27,571
Fuel-----	\$179,787	\$316,070	\$615,787	\$361,245	(3)	(3)	(3)
Purchased electric energy-----	\$137,095	\$362,519	\$256,435	\$95,807	\$600	(3)	(3)
Contract work-----	\$29,973	\$51,131	\$56,008	(3)	(3)	(3)	(3)
Cost of machinery and equipment erected or installed during year-----	\$92,489	\$397,107	(3)	(3)	(3)	(3)	(3)
Horsepower rating of power equipment, total-----	35,502	40,706	35,901	37,775	27,672	10,151	(3)
Per wage earner-----	20.4	11.5	8.1	3.8	2.6	0.9	(3)
Prime movers-----	19,859	15,885	22,896	35,895	27,661	(3)	(3)
Electric motors driven by purchased energy-----	15,643	24,821	13,005	5,882	1111	(3)	(3)
Horsepower rating of electric motors driven by energy generated by reporting companies-----	572	305	4,696	2,162	60	(3)	(3)
Fuels consumed:							
Anthracite (tons of 2,000 pounds)-----	223	1,204	2,742	(3)	(3)	(3)	(3)
Bituminous coal (tons of 2,000 pounds)-----	10,601	45,275	131,512	(3)	(3)	(3)	(3)
Fuel oils (barrels of 42 gallons)-----	23,424	35,649	8,621	(3)	(3)	(3)	(3)
Gasoline and kerosene (gallons)-----	724,970	348,141	64,554	(3)	(3)	(3)	(3)
Natural gas (thousands of cubic feet)-----	2,750	368,984	147,371	(3)	(3)	(3)	(3)
Electric energy consumed (thousands of kw.-hrs.), total-----	5,982	22,755	(3)	(3)	(3)	(3)	(3)
Purchased-----	5,910	22,635	(3)	(3)	(3)	(3)	(3)
Generated by reporting companies-----	72	120	(3)	(3)	(3)	(3)	(3)

<sup>1</sup>Statistics presented in this table cover the production of sandstone (including quartz, quartzite, and ganister) except that used for abrasive purposes and that quarried by Federal, State, and local governments, public utilities, and operators who produced stone exclusively for their own use in building or highway construction work. The statistics cover quarrying, stone-crushing, and rough-dimension stone-trimming operations; other dimension-stone dressing is excluded. Statistics for 1929 and earlier years include dimension-stone dressing at some operations engaged in both quarrying and dressing dimension stone for which quarry data could not be segregated. In 1929 the operators who included dimension-stone dressing activities in their reports produced 44,100 short tons of sandstone valued at \$661,807. In the 1929 and earlier censuses, data for some sandstone quarrying were segregated and classified in the silica industry. For the purpose of comparison with the 1939 figures the census figures for the sandstone industry and the silica (quartz and quartzite) industry in 1929 and earlier years have been combined in this table. The 1929 figures include statistics for diatomite and tripoli. The United States Bureau of Mines reported the production of approximately 130,000 short tons of diatomaceous earth and tripoli in 1929, valued at about \$1,900,000. Statistics for 1889 include figures for grindstones.

Statistics for 1939 include only those operations (quarries, mines, crushing, screening, or washing plants, or quarries or mines and plants operated together) whose total value of products; designated principal expenses; or cost of buildings, machinery, and equipment erected or installed during the year was at least \$2,500. Figures for 1929 exclude statistics for enterprises "whose output was valued at less than \$2,500; or, if not productive, in which development work costing less than \$2,500 was done." For 1919, "enterprises producing less than \$500 worth of products or ... operations confined to development work on which expenditures amounted to less than \$5,000 during the ... year were ... omitted." No minimum was placed on the size of operations included in 1909, 1902, 1889, and 1880.

<sup>2</sup>For 1939 and 1909, companies that submitted more than one report are counted only once in the totals.

<sup>3</sup>Not available.

<sup>4</sup>Excludes value of secondary products and services rendered.

<sup>5</sup>Excludes statistics for items for which information was not available as indicated by footnotes.

<sup>6</sup>On schedules for the 1902 census, concerns were instructed that "The average number employed during the year is the number that would be required, at continuous employment for the twelve months, to produce the quantity of products reported." "In editing the schedules ... the figures for the average number of employees were reduced to a 300-day basis whenever the schedules showed them to be the average number for a shorter period; when it was evident that the employees had worked more than 300 days, the average number for the longer period was allowed to stand."

<sup>7</sup>The 1889 census schedule called for "average number employed," presumably an average for active periods; and requested that figures for wage earners "include those employed by contractors and subcontractors."

<sup>8</sup>For 1919 and 1909, statistics include amounts paid for purchased power other than electric. Statistics for cost of purchased power for 1902 and 1889 were not explicitly requested but probably are included in part in the figures reported for supplies and materials.

<sup>9</sup>Represents cost of explosives.

<sup>10</sup>Represents horsepower of steam boilers and excludes data for "silica" operations.

<sup>11</sup>Includes 4 horsepower for equipment operated by purchased power other than electric.

## MINERAL INDUSTRIES

TABLE 89.—SUMMARY STATISTICS FOR THE SANDSTONE INDUSTRY IN THE UNITED STATES, BY STATE: 1939, 1929, 1919<sup>1</sup>

(For producing operations only)

STATE AND CENSUS YEAR	Number of quarries and mines	Number of wage earners (average for the year)	Number of salaried employees	Production of sandstone (tons of 2,000 pounds)	Value of all products	PRINCIPAL EXPENSES DESIGNATED BELOW					Aggregate horsepower rating of power equipment
						Total	Wages	Salaries	Supplies and materials, fuel, and purchased electric energy	Contract work	
United States:											
1939	127	1,737	132	3,295,036	\$4,444,634	\$2,969,339	\$1,650,587	\$229,990	\$1,058,789	\$29,973	35,502
1929	245	3,589	2467	4,959,789	10,957,119	27,727,189	4,305,844	1,086,236	2,275,976	51,131	40,706
1919	305	4,453	454	5,287,000	11,056,607	8,127,028	4,614,520	863,661	2,592,839	56,008	35,901
Pennsylvania:											
1939	41	675	60	1,237,201	1,593,687	1,081,650	643,914	91,308	329,829	16,599	13,439
1929	70	922	77	4,518,793	2,305,330	1,684,406	1,101,451	161,975	420,980	---	8,951
1919	111	1,716	152	2,296,000	3,589,430	2,965,149	1,728,964	226,517	1,007,184	2,484	11,234
South Dakota:											
1939	7	73	8	158,783	182,138	112,281	60,020	18,013	34,248	---	1,315
1929	6	58	10	158,000	195,707	145,345	87,678	25,100	52,567	---	1,690
1919	6	89	7	119,000	140,088	156,451	98,303	12,004	46,144	---	497
Wisconsin:											
1939 <sup>2</sup>	4	132	6	447,729	460,629	357,388	137,210	14,619	201,240	4,319	1,006
1929	9	141	10	204,427	282,685	236,578	167,545	15,426	53,607	---	724
1919	12	133	15	143,000	231,078	219,528	133,602	22,344	82,532	1,050	1,009
Other States:											
1939 <sup>2</sup>	75	857	58	1,451,343	2,208,200	1,418,020	809,443	106,050	493,472	9,055	19,742
1929	160	2,468	345	3,078,569	8,173,397	5,614,422	2,967,170	847,299	1,749,822	51,131	29,341
1919	176	2,515	280	2,729,000	7,096,081	4,785,900	2,653,651	602,796	1,476,979	52,474	23,161

<sup>1</sup> For definition of the industry and explanation of the extent of comparability of statistics for 1939, 1929, and 1919 see table 88, footnote 1. <sup>2</sup> Includes statistics for 25 salaried employees paid \$46,438 reported for central administrative offices for which statistics by State are not available. <sup>3</sup> Includes 412,370 tons of miscellaneous stone. <sup>4</sup> Includes miscellaneous unclassified stone. <sup>5</sup> Statistics for 1 dimension-stone operation in Wisconsin are included with those for "Other States."

TABLE 90.—PRINCIPAL STATISTICS FOR CRUSHED AND BROKEN SANDSTONE OPERATIONS IN THE UNITED STATES, BY STATE: 1939<sup>1</sup>

ITEM	United States	California	Colorado	New York	Pennsylvania	South Dakota	Wisconsin	Other States <sup>2</sup>
Number of operating companies	360	7	3	5	30	4	4	10
Number of quarries and mines	68	8	4	4	35	4	4	9
Number of preparation plants (crushing, screening, washing, and storage)	50	7	1	5	24	4	2	7
Number of persons engaged, total	1,246	140	15	54	696	72	138	131
Wage earners (average for the year)	1,134	123	15	47	637	65	132	115
Salaried employees	98	14	4	4	54	7	6	13
Proprietors and firm members	14	3	---	3	5	---	---	3
Performing manual labor	6	---	---	2	3	---	---	1
Production of sandstone: <sup>4</sup>								
Tons of 2,000 pounds, total	2,522,789	408,676	15,246	132,868	1,216,731	156,938	447,729	144,601
From underground mines	163,632	---	---	---	163,632	---	---	---
From open quarries	2,359,157	408,676	15,246	132,868	1,053,099	156,938	447,729	144,601
Value at quarries and mines	\$2,898,587	\$384,517	\$18,310	\$175,297	\$1,544,084	\$159,400	\$480,629	\$154,550
Value of all products	\$2,926,905	\$406,735	\$18,310	\$175,297	\$1,544,084	\$159,400	\$460,629	\$165,470
Principal expenses designated below, total	\$2,027,141	\$300,977	\$10,185	\$120,354	\$1,053,702	\$94,620	\$357,388	\$109,915
Wages	\$1,083,678	\$168,617	\$7,240	\$55,388	\$611,728	\$53,575	\$137,210	\$69,920
Salaries	\$175,588	\$32,436	---	\$8,780	\$84,808	\$16,013	\$14,619	\$16,882
Supplies and materials	\$516,619	\$50,494	\$1,828	\$52,912	\$191,341	\$17,322	\$193,014	\$11,708
Fuel	\$123,341	\$26,544	\$636	\$16,491	\$68,257	\$5,097	\$4,977	\$5,339
Purchased electric energy	\$105,194	\$21,386	\$481	\$6,783	\$62,969	\$4,613	\$5,249	\$5,713
Contract work	\$22,771	\$1,500	---	---	\$18,599	---	\$4,319	\$553
Cost of buildings, machinery, and equipment erected or installed during year	\$92,024	\$12,954	\$1,589	\$8,000	\$57,262	\$1,492	\$294	\$10,453
Buildings	\$22,765	---	\$981	\$2,500	\$17,184	---	---	\$2,100
Machinery and equipment, total	\$69,259	\$12,954	\$608	\$5,500	\$40,078	\$1,492	\$294	\$8,353
Purchased in new condition	\$38,566	\$10,856	\$608	---	\$19,253	\$1,492	\$294	\$8,083
Purchased in used condition	\$30,693	\$2,118	---	\$5,500	\$20,825	---	---	\$2,250
Total number of man-shifts worked by wage earners	247,456	30,023	2,807	9,943	136,640	14,358	31,158	22,527
Total number of man-hours worked by wage earners	1,990,193	241,647	21,736	83,204	1,090,923	113,749	249,886	189,046
Average number of hours worked per shift	8.0	8.0	7.7	8.4	8.0	7.9	8.0	8.4
Average hourly earning of wage earners	\$0.54	\$0.70	\$0.33	\$0.43	\$0.56	\$0.47	\$0.55	\$0.37
Tons of sandstone produced per man-hour, all mines	1.27	1.69	0.70	1.60	1.12	1.38	1.79	0.78
At underground mines	1.50	---	---	---	1.50	---	---	---
At open quarries	1.25	1.69	0.70	1.60	1.07	1.38	1.79	0.78
Average number of equivalent full days operations were active, all mines	162	204	128	197	180	153	220	150
Underground mines	154	---	---	---	154	---	---	---
Open quarries	184	204	128	197	184	153	220	150
Horsepower rating of power equipment, total	24,991	6,147	463	1,404	12,920	1,135	1,006	1,916
Per wage earner	22.0	50.0	30.9	29.9	20.3	17.5	7.6	16.7
Stationary equipment <sup>5</sup>	14,283	3,563	88	930	7,462	641	538	1,061
Mobile equipment <sup>6</sup>	10,708	2,584	375	474	5,458	494	468	855
Electric energy consumed (thousands of kw.-hrs.), total	4,508	1,086	15	258	2,660	157	140	214
Purchased	4,460	1,086	15	258	2,648	157	140	178
Generated by reporting companies	48	---	---	---	12	---	---	36

<sup>1</sup> For definition of the sandstone industry see table 88, footnote 1. Tables 90 through 103 cover only those operations in the industry that were engaged principally in the production of crushed and broken sandstone.

<sup>2</sup> Alabama, Kansas, Massachusetts, Montana, North Carolina, Oregon, Texas, Utah, Vermont, and Virginia, 1 quarry each.

<sup>3</sup> One company had operations in 3 of the designated areas, and 1 company had operations in 2 of the areas.

<sup>4</sup> Includes 23,017 short tons of dimension stone, valued at \$22,529, and 212 short tons of natural abrasives valued at \$1,272 produced at quarries and mines engaged principally in the production of crushed and broken stone.

<sup>5</sup> Aggregate horsepower rating of engines, motors, etc. used for driving stationary or fixed equipment such as hoists, screens, crushers, compressors, etc.

<sup>6</sup> Aggregate horsepower rating of engines, motors, etc. used for driving mobile equipment such as power shovels, locomotives, trucks, tractors, churn drills, etc.

TABLE 91.—QUANTITY AND VALUE OF PRODUCTS OF CRUSHED AND BROKEN SANDSTONE OPERATIONS IN THE UNITED STATES, BY TYPE OF PRODUCT AND BY STATE: 1939<sup>1</sup>

TYPE OF PRODUCT	UNITED STATES		CALIFORNIA		COLORADO		NEW YORK	
	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value
All products, total	( <sup>2</sup> )	\$2,929,905	( <sup>2</sup> )	\$406,735	15,246	\$18,310	132,868	\$175,297
All sandstone produced, total <sup>3</sup>	2,522,789	2,896,567	408,676	384,317	15,246	18,310	132,868	175,297
Rough-dimension sandstone, total	23,017	22,529	-----	-----	324	855	100	100
For use in construction:								
Irregular-shaped stone for buildings, foundations, sea walls, bridges, etc.	21,340	22,013	-----	-----	324	855	100	100
Rubble (cellar foundations, retaining walls, and similar low-priced stone)	1,677	516	-----	-----	-----	-----	-----	-----
Dressed-dimension sandstone, including sawed, cut, or split stone, total	7	41	-----	-----	7	41	-----	-----
For use in construction or architecture (walls, roofing, foundations, bridges, etc.)	7	41	-----	-----	7	41	-----	-----
Rough blocks used to produce dressed-dimension sandstone	7	41	-----	-----	7	41	-----	-----
Crushed, broken, and ground sandstone, total	2,499,553	2,872,725	408,676	384,317	14,915	17,414	132,768	175,197
Riprap	133,493	79,372	55,945	25,524	-----	-----	955	534
Concrete and road metal	1,022,700	1,152,670	211,274	232,044	3,590	4,739	131,813	174,663
Railroad ballast	237,394	216,617	2,115	2,538	-----	-----	-----	-----
Metallurgical (furnace flux)	3,355	5,354	-----	-----	-----	-----	-----	-----
Refractory (ganister, mica schist, etc.)	594,599	931,772	6,897	18,965	11,325	12,675	-----	-----
Other uses	508,012	488,540	132,445	105,245	-----	-----	-----	-----
Ground natural abrasives	212	1,272	-----	-----	-----	-----	-----	-----
Secondary products (sand and gravel)	35,853	26,825	30,344	22,418	-----	-----	-----	-----
Receipts for services performed for others	( <sup>2</sup> )	6,513	-----	-----	-----	-----	-----	-----
TYPE OF PRODUCT	PENNSYLVANIA		SOUTH DAKOTA		WISCONSIN		OTHER STATES	
	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value
All products, total	1,216,731	\$1,544,064	156,938	\$159,400	447,729	\$460,629	( <sup>2</sup> )	\$165,470
All sandstone produced, total <sup>3</sup>	1,216,731	1,544,064	156,938	159,400	447,729	460,629	144,601	154,550
Rough-dimension sandstone, total	21,093	21,199	-----	-----	-----	-----	1,500	375
For use in construction:								
Irregular-shaped stone for buildings, foundations, sea walls, bridges, etc.	20,916	21,058	-----	-----	-----	-----	-----	-----
Rubble (cellar foundations, retaining walls, and similar low-priced stone)	177	141	-----	-----	-----	-----	1,500	375
Dressed-dimension sandstone, including sawed, cut, or split stone, total	-----	-----	-----	-----	-----	-----	-----	-----
For use in construction or architecture (walls, roofing, foundations, bridges, etc.)	-----	-----	-----	-----	-----	-----	-----	-----
Rough blocks used to produce dressed-dimension sandstone	-----	-----	-----	-----	-----	-----	-----	-----
Crushed, broken, and ground sandstone, total	1,195,638	1,522,865	156,938	159,400	447,729	460,629	142,889	152,903
Riprap	1,777	2,305	65,581	39,002	-----	-----	9,235	12,007
Concrete and road metal	539,595	575,790	80,771	105,022	1,469	3,969	54,186	56,643
Railroad ballast	200,811	193,059	-----	-----	-----	-----	34,468	21,220
Metallurgical (furnace flux)	712	712	-----	-----	-----	-----	2,643	2,642
Refractory (ganister, mica schist, etc.)	437,050	708,617	1,800	3,588	114,478	152,969	23,049	34,757
Other uses	15,693	42,182	8,786	11,788	331,782	303,691	19,306	25,634
Ground natural abrasives	-----	-----	-----	-----	-----	-----	212	1,272
Secondary products (sand and gravel)	-----	-----	-----	-----	-----	-----	5,509	4,407
Receipts for services performed for others	-----	-----	-----	-----	-----	-----	( <sup>2</sup> )	6,513

<sup>1</sup>For definition of the industry see tables 88 and 90, footnote 1.<sup>2</sup>Not significant.<sup>3</sup>Represents the sum of "Rough-dimension sandstone," "Rough blocks used to produce dressed-dimension sandstone," "Crushed, broken, and ground sandstone," and "Ground natural abrasives."

## MINERAL INDUSTRIES

TABLE 92.—NUMBER OF WAGE EARNERS AT CRUSHED AND BROKEN SANDSTONE OPERATIONS IN THE UNITED STATES, BY TYPE OF OPERATION, BY STATE, AND BY MONTH: 1939<sup>1</sup>

STATE AND TYPE OF OPERATION	Average for the 12 months	NUMBER RECEIVING PAY DURING PAY-ROLL PERIOD ENDING NEAREST THE 15TH OF THE MONTH											
		January	February	March	April	May	June	July	August	September	October	November	December
United States, total	1,134	855	791	867	1,065	1,173	1,239	1,263	1,268	1,317	1,373	1,302	1,095
TYPE OF OPERATION													
Quarries and mines only	376	306	314	321	321	375	373	364	370	388	461	469	449
Quarries or mines and preparation plants operated together	748	544	472	538	733	786	854	888	889	919	899	820	637
Preparation plants	10	5	5	8	11	12	12	11	9	10	13	13	7
STATE													
California	123	131	116	133	129	86	127	124	118	135	145	135	94
Colorado	15	12	18	15	15	12	17	13	15	15	17	17	10
New York	47	22	21	25	47	61	66	71	69	64	45	38	31
Pennsylvania	637	433	427	474	589	600	636	705	698	755	829	789	703
South Dakota	65	50	3	10	66	156	113	93	108	100	52	49	3
Wisconsin	132	99	95	96	95	170	147	141	141	141	166	157	141
Other States	115	108	111	114	124	108	133	116	119	107	119	107	111

<sup>1</sup>For definition of the industry see tables 88 and 90, footnote 1.TABLE 93.—EMPLOYMENT AND WORKING TIME AT CRUSHED AND BROKEN SANDSTONE OPERATIONS IN THE UNITED STATES, BY DEPARTMENT AND BY STATE: 1939<sup>1</sup>

DEPARTMENT	United States	California	Colorado	New York	Pennsylvania	South Dakota	Wisconsin	Other States
Average number of wage earners on active days, total	1,331	137	22	50	749	89	139	145
At quarries and mines, total	1,083	87	21	30	628	66	133	118
Underground	64	—	—	—	64	—	—	—
Open-cut	988	72	16	30	553	66	133	118
Surface shops and yards	31	15	5	—	11	—	—	—
At preparation plants (crushing, screening, washing, and storage)	248	50	1	20	121	23	6	27
Average number of equivalent full days operations were active	182	204	128	197	180	153	220	150
At quarries and mines, total	182	215	124	195	181	144	223	149
Underground	141	—	—	—	141	—	—	—
Open-cut	185	222	154	195	184	144	223	149
Surface shops and yards	171	186	27	—	216	—	—	—
At preparation plants (crushing, screening, washing, and storage)	179	185	209	200	180	178	155	153
Number of man-shifts worked by wage earners, total <sup>2</sup>	247,456	30,023	2,807	9,943	136,640	14,358	31,188	22,527
On active days, total	241,705	28,002	2,807	9,829	135,144	13,618	30,617	21,688
At quarries and mines, total	197,816	18,746	2,598	5,855	113,564	9,524	29,686	17,563
Underground	9,007	—	—	—	9,007	—	—	—
Open-cut	188,012	15,958	2,463	5,855	101,983	9,524	29,686	17,563
Surface shops and yards	5,297	2,788	155	—	2,374	—	—	—
At preparation plants (crushing, screening, washing, and storage)	44,389	9,256	209	3,994	21,780	4,094	931	4,125
On inactive days	5,751	2,021	—	114	1,496	740	541	859
Number of man-hours worked by wage earners, total	1,990,193	241,647	21,736	83,204	1,090,923	113,749	249,886	189,048
On active days, total	1,944,751	224,016	21,736	82,232	1,080,608	108,245	245,561	182,333
At quarries and mines, total	1,580,521	149,970	20,064	47,910	900,887	75,702	238,076	147,912
Underground	72,016	—	—	—	72,016	—	—	—
Open-cut	1,464,744	127,665	18,984	47,910	808,495	75,702	238,076	147,912
Surface shops and yards	43,761	22,305	1,080	—	20,376	—	—	—
At preparation plants (crushing, screening, washing, and storage)	364,210	74,046	1,672	34,322	179,721	52,543	7,485	34,421
On inactive days	45,462	17,631	—	972	10,315	5,504	4,325	6,715

<sup>1</sup>For definition of the industry see tables 88 and 90, footnote 1. <sup>2</sup>Of the total, 168 man-shifts in Pennsylvania and 6,010 man-shifts in Wisconsin were worked during a second shift and 2,033 man-shifts in Wisconsin were worked during a third shift.TABLE 94.—QUANTITY OF FUEL AND ELECTRIC ENERGY CONSUMED AT CRUSHED AND BROKEN SANDSTONE OPERATIONS IN THE UNITED STATES, BY TYPE OF OPERATION AND BY STATE: 1939<sup>1</sup>

TYPE OF OPERATION AND STATE	FUEL					ELECTRIC ENERGY (thousands of kilowatt-hours)		
	Anthracite (tons of 2,000 pounds)	Bituminous coal (tons of 2,000 pounds)	Fuel oils (barrels of 42 gallons)	Gasoline and kerosene (gallons)	Natural gas (thousands of cubic feet)	Total	Purchased	Generated by reporting companies
United States, total	145	5,487	13,616	571,159	2,750	4,508	4,460	48
TYPE OF OPERATION								
Quarries and mines only	1	282	4,310	61,868	—	114	114	—
Quarries or mines and preparation plants operated together	144	5,205	9,306	491,829	2,750	4,392	4,334	48
Preparation plants only	—	—	—	17,462	—	12	12	—
STATE								
California	—	—	6,904	138,497	—	1,086	1,086	—
Colorado	—	—	—	3,882	—	15	15	—
New York	—	116	—	95,605	—	236	236	—
Pennsylvania	144	4,901	1,935	284,963	2,750	2,660	2,648	12
South Dakota	—	—	6	21,057	—	157	157	—
Wisconsin	—	364	4,382	875	—	140	140	—
Other States	1	106	389	26,480	—	214	178	36

<sup>1</sup>For definition of the industry see tables 88 and 90, footnote 1.

TABLE 95.—NUMBER AND HORSEPOWER RATING OF PRIME MOVERS AND ELECTRIC MOTORS AT CRUSHED AND BROKEN SANDSTONE OPERATIONS IN THE UNITED STATES, BY TYPE OF OPERATION AND BY STATE: 1939<sup>1</sup>

TYPE OF OPERATION AND STATE	PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY										ELECTRIC MOTORS DRIVEN BY ENERGY GENERATED BY REPORTING COMPANIES		
	Aggregate horsepower	Prime movers								Electric motors driven by purchased energy		Number	Horsepower
		Total		Driving generators		Not driving generators		Ordinarily idle (included in preceding columns)		Number	Horsepower		
		Number	Horsepower	Number	Horsepower	Number	Horsepower	Number	Horsepower				
United States, total	24,991	273	13,958	2	440	271	13,518	5	415	382	11,033	21	502
Stationary	14,283	71	3,854	2	440	69	3,414	3	365	359	10,429	21	502
Mobile	10,708	202	10,104			202	10,104	2	50	23	604		
TYPE OF OPERATION													
Quarries only, total <sup>2</sup>	2,901	51	2,431			51	2,431			23	470		
Stationary	862	11	412			11	412			23	470		
Mobile	2,019	40	2,019			40	2,019						
Quarries or mines and preparation plants operated together, total	22,090	222	11,527	2	440	220	11,087	5	415	359	10,563	21	502
Stationary	13,401	60	3,442	2	440	58	3,002	3	365	356	9,959	21	502
Mobile	8,689	162	8,085			162	8,085	2	50	23	604		
Open-cut quarries, total	20,581	216	11,065	2	440	214	10,625	5	415	332	9,516	21	502
Stationary	12,274	57	3,212	2	440	55	2,772	3	365	313	9,062	21	502
Mobile	8,307	159	7,853			159	7,853	2	50	19	454		
Underground mines, total <sup>3</sup>	1,508	3	462			3	462			27	1,047		
Stationary	1,127	3	230			3	230			23	897		
Mobile	382	3	232			3	232			4	150		
STATE													
California, total	6,147	40	2,694			40	2,694			123	3,453		
Stationary	3,563	2	140			2	140			122	3,423		
Mobile	2,584	38	2,554			38	2,554			1	30		
Colorado, total	463	6	375			6	375			6	88		
Stationary	88									6	88		
Mobile	375	6	375			6	375						
New York, total	1,404	11	614			11	614			18	790		
Stationary	930	2	140			2	140			18	790		
Mobile	474	9	474			9	474						
Pennsylvania, total	12,920	171	7,721	1	240	170	7,481	5	415	170	5,199	11	287
Stationary	7,462	55	2,782	1	240	54	2,542	3	365	150	4,680	11	287
Mobile	5,458	116	4,939			116	4,939	2	50	20	519		
South Dakota, total	1,135	14	504			14	504			24	601		
Stationary	641	1	40			1	40			1	30		
Mobile	494	13	464			13	464			5	205		
Wisconsin, total	1,006	10	803			10	803			5	205		
Stationary	538	4	335			4	335			5	205		
Mobile	468	6	468			6	468						
Other States, total	1,916	21	1,247	1	200	20	1,047			35	669	10	215
Stationary	1,061	7	417	1	200	6	217			34	644	10	215
Mobile	855	14	830			14	830			1	25		

<sup>1</sup> For definition of the industry see tables 88 and 90, footnote 1.<sup>2</sup> Includes statistics for 1 underground mine.<sup>3</sup> Includes statistics for 1 preparation plant not operated in conjunction with a mine.TABLE 96.—NUMBER OF POWER-LOADING MACHINES AT CRUSHED AND BROKEN SANDSTONE OPERATIONS IN THE UNITED STATES, BY TYPE, BY KIND OF POWER USED, BY SIZE, AND BY STATE: 1939<sup>1</sup>

TYPE, KIND OF POWER USED, AND SIZE	United States	California	Colorado	New York	Pennsylvania	South Dakota	Wisconsin	Other States
Power shovels, total <sup>2</sup>	60	11	2	7	33	1	3	3
Kind of power used:								
Steam	24	5		1	17			1
Electric	3	1				1		1
Internal-combustion engine	33	5	2	6	16		3	1
Clamshell or orange-peel loaders, total	14	5		1	7	1		
Kind of power used:								
Steam	8	4			4			
Electric	1				1			
Internal-combustion engine	5	1		1	2	1		
Other types, total <sup>3</sup>	7	2			4	1		
Kind of power used:								
Electric	5				3			
Internal-combustion engine	4	2			1	1		

<sup>1</sup> For definition of the industry see tables 88 and 90, footnote 1.<sup>2</sup> All had dipper capacities of less than 3 cubic yards.<sup>3</sup> Represents 1 sand pump and 3 bucket loaders operated by internal-combustion engines and 3 electric underground shovel loaders requiring minimum working height of more than 8 feet.

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TABLE 97.--SELECTED STATISTICS FOR INCORPORATED AND UNINCORPORATED OPERATING COMPANIES ENGAGED IN CRUSHED AND BROKEN SANDSTONE OPERATIONS IN THE UNITED STATES, BY STATE: 1939<sup>1</sup>

STATE AND TYPE OF OWNERSHIP	Number of operating companies	Number of quarries and mines	Number of preparation plants	Production of sandstone (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED				Wages	Salaries
						Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members		
United States, total	60	68	50	2,522,789	\$2,929,905	1,246	1,134	98	14	\$1,085,678	\$173,558
Incorporated	40	48	35	2,195,223	2,495,213	1,050	966	84	-----	934,052	161,611
Unincorporated	20	20	15	327,566	434,692	196	168	14	14	149,626	11,927
California, total	7	8	7	408,676	406,755	140	123	14	3	168,617	32,456
Incorporated	5	6	6	408,676	406,755	140	123	14	3	168,617	32,456
Unincorporated	2	2	1	-----	-----	-----	-----	-----	-----	-----	-----
Colorado <sup>2</sup>	3	4	1	15,246	18,310	15	15	-----	-----	7,240	-----
New York, total	5	4	5	132,868	175,297	54	47	4	3	35,388	8,780
Incorporated	3	3	3	132,868	175,297	54	47	4	3	35,388	8,780
Unincorporated	2	1	2	-----	-----	-----	-----	-----	-----	-----	-----
Pennsylvania, total	30	35	24	1,216,731	1,544,064	696	637	54	5	611,728	84,808
Incorporated	20	25	15	989,811	1,231,792	558	516	42	-----	507,329	75,233
Unincorporated	10	10	9	226,920	312,272	138	121	12	5	104,399	9,575
South Dakota <sup>3</sup>	4	4	4	156,938	159,400	72	65	7	-----	55,575	16,013
Wisconsin <sup>3</sup>	4	4	2	447,729	460,629	138	132	6	-----	137,210	14,619
Other States, total	10	9	7	144,601	165,470	131	115	13	3	69,920	16,882
Incorporated	7	6	5	137,258	150,378	113	101	12	-----	62,909	16,442
Unincorporated	3	3	2	7,343	15,092	18	14	1	3	7,011	440

<sup>1</sup>For definition of the industry see tables 88 and 90, footnote 1.<sup>2</sup>All companies were unincorporated.<sup>3</sup>All companies were incorporated.TABLE 98.--SELECTED STATISTICS FOR CRUSHED AND BROKEN SANDSTONE OPERATIONS IN THE UNITED STATES, CLASSIFIED BY VALUE OF PRODUCTS AND BY STATE: 1939<sup>1</sup>

STATE AND VALUE OF PRODUCTS	Number of quarries and mines	Number of preparation plants	Production of sandstone (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED					Wages	Salaries
					Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members			
								Total	Performing manual labor		
United States, total	68	50	2,522,789	\$2,929,905	1,246	1,134	98	14	6	\$1,085,678	\$173,558
\$1 - \$19,999	25	18	242,953	270,528	182	155	17	10	5	120,203	19,851
\$20,000 - \$49,999	25	17	611,002	754,218	381	344	33	4	1	271,165	45,683
\$50,000 - \$99,999	12	10	709,054	887,904	356	329	27	-----	-----	338,836	63,455
\$100,000 - \$249,999	5	5	555,282	597,925	199	184	15	-----	-----	229,864	32,922
\$250,000 - \$499,999	1	-----	404,498	419,330	128	122	6	-----	-----	123,610	11,627
Unclassified	2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
California, total	8	7	408,676	406,755	140	123	14	3	-----	168,617	32,456
\$1 - \$19,999	2	1	140,991	130,306	38	31	4	3	-----	50,490	7,612
\$20,000 - \$49,999	2	2	-----	-----	-----	-----	-----	-----	-----	-----	-----
\$50,000 - \$99,999	3	3	267,685	276,429	102	92	10	-----	-----	118,127	24,824
\$100,000 - \$249,999	1	1	-----	-----	-----	-----	-----	-----	-----	-----	-----
Colorado, total	4	1	15,246	18,310	15	15	-----	-----	-----	7,240	-----
\$1 - \$19,999	4	1	15,246	18,310	15	15	-----	-----	-----	7,240	-----
Pennsylvania, total	35	24	1,216,731	1,544,064	696	637	54	5	3	611,728	84,808
\$1 - \$19,999	10	7	97,381	109,285	84	73	8	3	2	55,751	7,203
\$20,000 - \$49,999	15	10	339,443	454,728	231	208	21	2	1	159,082	22,554
\$50,000 - \$99,999	5	3	283,471	383,973	163	152	11	-----	-----	159,552	24,568
\$100,000 - \$249,999	4	4	496,436	596,078	218	204	14	-----	-----	237,543	30,705
Unclassified	1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Other States, total	21	18	882,136	960,796	395	359	30	6	3	296,095	58,294
\$1 - \$19,999	9	9	260,894	312,117	196	173	17	6	3	118,805	28,385
\$20,000 - \$49,999	6	5	-----	-----	-----	-----	-----	-----	-----	-----	-----
\$50,000 - \$99,999	4	4	-----	-----	-----	-----	-----	-----	-----	-----	-----
\$250,000 - \$499,999	1	-----	621,242	648,679	199	186	13	-----	-----	177,288	27,909
Unclassified	1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

<sup>1</sup>For definition of the industry see tables 88 and 90, footnote 1. Reports classified by value of products represent a single quarry or mine, a single preparation plant, or a single quarry or mine and a single preparation plant reported together. Statistics shown for "Unclassified" represent reports on which figures were not adequately reported for classification.

TABLE 99.--SELECTED STATISTICS FOR CRUSHED AND BROKEN SANDSTONE OPERATIONS IN THE UNITED STATES, CLASSIFIED BY QUANTITY OF STONE PRODUCED AND BY STATE: 1939<sup>1</sup>

STATE AND TONS OF SANDSTONE (tons of 2,000 pounds)	Number of quarries and mines	Number of preparation plants	Production of sand- stone (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED					Wages	Salaries
					Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members			
								Total	Performing manual labor		
United States, total	68	50	2,522,789	\$2,929,905	1,246	1,134	98	14	6	\$1,083,678	\$173,538
1 - 999	1	1	35,205	77,750	59	50	4	5	3	29,773	4,845
1,000 - 4,999	10	8	92,098	146,057	89	75	12	2	1	55,907	13,976
5,000 - 9,999	11	8	254,411	281,923	147	130	13	4	1	111,149	16,163
10,000 - 14,999	3	8	635,322	787,954	364	331	30	3	1	294,480	51,451
15,000 - 24,999	9	13	501,090	601,805	270	259	11	---	---	249,424	24,415
25,000 - 49,999	18	6	925,445	855,284	221	200	21	---	---	253,815	44,891
50,000 - 99,999	7	5	99,218	169,132	98	89	7	---	---	89,130	17,797
100,000 - 199,999	5	1									
200,000 - 499,999	1										
Unclassified	3										
California, total	8	7	408,676	406,735	140	123	14	3	---	168,617	32,436
1,000 - 4,999	---	1	180,866	182,308	52	45	6	3	---	62,709	10,372
5,000 - 9,999	1	3	---	---	---	---	---	---	---	---	---
25,000 - 49,999	4	1	---	---	---	---	---	---	---	---	---
50,000 - 99,999	1	1	227,810	224,429	88	80	8	---	---	105,908	22,064
100,000 - 199,999	1	1	---	---	---	---	---	---	---	---	---
Unclassified	1	1	---	---	---	---	---	---	---	---	---
Pennsylvania, total	35	24	1,216,731	1,544,064	698	637	54	5	3	611,728	84,808
1,000 - 4,999	4	4	14,097	42,530	25	20	3	2	2	13,292	4,405
5,000 - 9,999	3	2	21,800	28,406	24	20	4	---	---	13,849	2,438
10,000 - 14,999	3	6	197,197	237,643	132	119	11	2	---	97,220	12,063
15,000 - 24,999	8	7	532,125	459,904	211	193	17	1	1	170,027	26,142
25,000 - 49,999	10	1	651,512	775,581	304	285	19	---	---	317,340	39,760
50,000 - 99,999	2	4	---	---	---	---	---	---	---	---	---
100,000 - 199,999	4	1	---	---	---	---	---	---	---	---	---
Unclassified	1	4	---	---	---	---	---	---	---	---	---
Other States, total	25	19	897,362	979,106	410	374	30	6	3	303,333	56,294
1 - 999	1	1	80,994	129,084	94	81	9	4	2	52,990	11,978
1,000 - 4,999	6	6	---	---	---	---	---	---	---	---	---
5,000 - 9,999	7	2	169,957	213,811	120	109	9	2	1	81,222	19,037
15,000 - 24,999	1	3	---	---	---	---	---	---	---	---	---
25,000 - 49,999	4	4	646,431	636,211	196	184	12	---	---	169,121	25,279
50,000 - 99,999	4	---	---	---	---	---	---	---	---	---	---
100,000 - 499,999	1	---	---	---	---	---	---	---	---	---	---
Unclassified	1	---	---	---	---	---	---	---	---	---	---

<sup>1</sup> For definition of the industry see tables 88 and 90, footnote 1. Reports classified by quantity of sandstone produced represent a single quarry or mine, a single preparation plant, or a single quarry or mine and a single preparation plant reported together. Statistics shown for "Unclassified" represent reports on which figures were not adequately reported for classification.

TABLE 100.--SELECTED STATISTICS FOR CRUSHED AND BROKEN SANDSTONE OPERATIONS IN THE UNITED STATES, CLASSIFIED BY NUMBER OF WAGE EARNERS AND BY STATE: 1939<sup>1</sup>

STATE AND NUMBER OF WAGE EARNERS	Number of quarries and mines	Number of preparation plants	Production of sand- stone (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED					Wages	Salaries
					Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members			
								Total	Performing manual labor		
United States, total	68	50	2,522,789	\$2,929,905	1,246	1,134	98	14	6	\$1,083,678	\$173,538
1 - 5	16	11	158,284	164,345	76	61	8	7	5	55,020	8,934
6 - 20	34	27	811,293	1,049,384	473	416	50	7	1	359,384	80,970
21 - 50	12	10	1,005,259	1,050,054	435	403	32	---	---	418,912	67,661
51 - 100	3	1	444,733	513,536	173	168	5	---	---	179,058	11,546
Unclassified	3	1	103,240	152,586	89	86	3	---	---	73,304	4,397
California, total	8	7	408,676	406,735	140	123	14	3	---	168,617	32,436
1 - 5	2	1	58,491	43,018	11	9	1	1	---	14,956	2,400
6 - 20	4	4	350,185	363,717	129	114	13	2	---	153,661	30,036
21 - 50	2	2	---	---	---	---	---	---	---	---	---
Colorado, total	4	1	15,246	18,310	15	15	---	---	---	7,240	---
1 - 5	4	1	15,246	18,310	15	15	---	---	---	7,240	---
Pennsylvania, total	35	24	1,216,731	1,544,064	698	637	54	5	3	611,728	84,808
1 - 5	5	4	34,793	42,575	21	15	4	2	2	14,718	4,166
6 - 20	20	14	414,728	540,518	273	245	25	3	1	192,919	25,371
21 - 50	7	5	594,448	649,106	229	207	22	---	---	234,389	48,012
51 - 100	2	1	172,762	311,865	173	170	3	---	---	169,702	7,259
Unclassified	1	---	---	---	---	---	---	---	---	---	---
Other States, total	21	18	882,136	960,796	395	359	30	6	3	296,093	56,294
1 - 5	5	5	49,734	60,442	29	22	3	4	3	18,106	2,368
6 - 20	10	9	457,191	546,097	277	253	22	2	---	195,327	45,242
21 - 50	3	3	---	---	---	---	---	---	---	---	---
51 - 100	1	---	---	---	---	---	---	---	---	---	---
Unclassified	2	1	375,211	354,257	89	84	5	---	---	82,660	8,684

<sup>1</sup> For definition of the industry see tables 88 and 90, footnote 1. Reports classified by average number of wage earners during the year represent a single quarry or mine, a single preparation plant, or a single quarry or mine and a single preparation plant reported together. Statistics shown for "Unclassified" represent reports on which number of wage earners, by month, was not adequately reported.

## MINERAL INDUSTRIES

TABLE 101.--SELECTED STATISTICS FOR CRUSHED AND BROKEN SANDSTONE OPERATIONS IN THE UNITED STATES, CLASSIFIED BY NUMBER OF HOURS PER WAGE EARNER IN THE FULL-TIME WORKWEEK, AND BY STATE: 1939<sup>1</sup>

STATE AND HOURS PER WEEK	Number of quarries and mines	Number of preparation plants	Production of sandstone (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED					Wages	Salaries
					Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members			
								Total	Performing manual labor		
United States, total	68	50	2,522,789	\$2,929,905	1,246	1,134	98	14	6	\$1,083,678	\$176,538
1 - 34	2	1	79,940	82,691	71	68	2	1	1	41,625	6,127
35	1	1									
36 - 39	2	1	1,207,954	1,363,179	538	492	40	6	2	503,320	76,227
40	23	15									
41 - 42	9	6	477,395	577,978	240	228	12			244,773	26,023
43 - 44	8	5	266,349	249,379	99	89	10			72,084	15,805
46	7	7	171,702	279,471	116	105	11			99,331	25,935
60 and over	4	4	144,382	139,450	59	50	7	2		49,180	11,290
Unclassified	12	12	175,067	237,777	123	102	16	5	3	73,385	12,131
California, total	8	7	408,676	408,735	140	123	14	3		168,617	32,436
40	5	4	333,759	280,450	96	86	8	2		123,823	16,276
43 - 44	1	1									
46	1	2	74,917	128,285	44	37	6	1		44,794	16,160
Unclassified	1										
Pennsylvania, total	35	24	1,216,731	1,544,064	896	637	54	5	3	611,728	84,608
1 - 34	1		514,652	732,224	346	320	24	2	1	302,231	47,247
40	15	9									
41 - 42	5	3	344,578	383,640	154	147	7			165,755	14,451
43 - 44	3	2	54,441	58,726	25	21	4			16,623	3,422
46	4	3	203,639	240,455	111	101	9	1		96,164	14,605
60 and over	2	2	99,241	129,019	60	48	10	2	2	30,950	5,083
Unclassified	5	5									
Other States, total	25	19	897,382	979,106	410	374	30	6	3	303,333	56,294
1 - 34	1		45,637	51,771	37	34	2	1	1	21,974	6,127
35	1	1									
36 - 39	2	1	393,666	381,425	130	120	8	2	1	96,917	12,704
40	3	2									
41 - 42	4	3	132,817	194,338	85	80	5			79,018	11,572
43 - 44	4	2	240,962	228,445	219	210	2	2	2	281,583	216,871
46	2	2	84,300	123,127	39	33	5	1		23,841	9,220
60 and over	2	2									
Unclassified	6	7	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)

<sup>1</sup> For definition of the industry see tables 88 and 90, footnote 1. Reports were classified by number of hours in the full-time workweek reported for wage earners in that department of the operation for which the largest number of man-hours worked was reported. Statistics shown for "Unclassified" represent reports on which number of hours was not reported.

<sup>2</sup> Statistics shown for operations classified in the 43 to 44 class interval include those for "Unclassified" operations.

TABLE 102.--SELECTED STATISTICS FOR CRUSHED AND BROKEN SANDSTONE OPERATIONS IN THE UNITED STATES, CLASSIFIED BY NUMBER OF DAYS ACTIVE DURING THE YEAR: 1939<sup>1</sup>

NUMBER OF DAYS ACTIVE DURING YEAR	Number of quarries and mines	Number of preparation plants	Production of sandstone (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED					Wages	Salaries
					Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members			
								Total	Performing manual labor		
United States, total	68	50	2,522,789	\$2,929,905	1,246	1,134	98	14	6	\$1,083,678	\$173,538
1 - 49	2	1	49,328	63,246	37	29	7	1	1	20,020	8,009
50 - 99	5	3									
100 - 149	12	9	328,660	368,146	196	176	17	3	5	106,693	21,661
150 - 199	19	14									
200 - 224	7	7	659,848	768,467	357	331	19			302,926	33,039
225 - 249	7	7	286,821	334,370	129	121	8			134,044	12,923
250 - 274	12	7	462,895	605,896	264	238	24	2		273,807	51,075
275 - 299	4	5	603,411	587,234	145	130	15			149,746	36,381
300 - 324	1	1									
Unclassified	5	4	130,028	202,546	118	109	9	1		94,442	10,445

<sup>1</sup> For definition of the industry see tables 88 and 90, footnote 1. Reports classified by number of days active represent a single quarry or mine, a single preparation plant, or a single quarry or mine and a single preparation plant reported together; such reports for a single quarry or mine or a single preparation plant were classified by number of days the quarry or mine or preparation plant was in operation for production or development purposes during the year; such reports for a single quarry or mine and a single preparation plant reported together were classified by number of days the quarry or mine was in operation during the year. Statistics shown for "Unclassified" represent reports on which number of days active was not reported.

TABLE 103.—SELECTED STATISTICS FOR CRUSHED AND BROKEN SANDSTONE OPERATIONS IN THE UNITED STATES,  
CLASSIFIED BY OUTPUT PER MAN-HOUR AND BY STATE: 1939<sup>1</sup>

STATE AND TONS OF SANDSTONE PER MAN-HOUR (tons of 2,000 pounds)	Number of quarries and mines	Number of preparation plants	Production of sand- stone (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED					Wages	Salaries
					Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members			
								Total	Performing manual labor		
United States, total	68	50	2,522,789	\$2,929,905	1,246	1,134	98	14	6	\$1,083,678	\$173,538
Less than 0.20	2	2	9,546	47,197	32	27	3	2	-----	17,218	3,320
0.20 - 0.39	2	2									
0.40 - 0.59	6	4	70,229	126,238	100	93	6	1	1	53,762	8,876
0.60 - 0.79	9	4	247,445	390,202	241	232	8	1	-----	208,740	9,659
0.80 - 0.99	13	9	337,684	454,535	223	206	16	1	1	195,362	37,116
1.00 - 1.49	10	7	200,535	231,511	85	73	11	1	1	73,384	14,641
1.50 - 1.99	12	10	577,409	577,231	215	185	27	3	2	176,717	39,433
2.00 - 2.49	5	5	362,157	373,811	107	96	7	4	1	126,574	16,892
2.50 - 2.99	1	1	586,641	480,957	105	97	8	-----	-----	111,933	19,758
3.00 - 6.99	2	1									
Unclassified	6	5	151,143	248,223	138	125	12	1	-----	119,888	23,845
California, total	8	7	408,676	406,735	140	123	14	3	-----	168,617	32,436
0.60 - 0.79	-----	1	165,035	172,168	60	54	6	-----	-----	64,026	9,584
1.50 - 1.99	3	3									
2.00 - 2.49	2	2	243,641	234,567	80	69	8	3	-----	104,591	22,872
3.00 - 6.99	1	1									
Unclassified	2	1	-----	-----	-----	-----	-----	-----	-----	-----	-----
Pennsylvania, total	35	24	1,216,731	1,544,084	696	637	54	5	3	611,728	84,808
0.20 - 0.39	1	1	29,540	79,337	44	39	4	1	1	29,117	6,006
0.40 - 0.59	3	1									
0.60 - 0.79	8	3	240,205	382,205	233	224	8	1	-----	206,141	9,659
0.80 - 0.99	8	6	175,053	246,732	123	112	10	1	1	104,742	21,147
1.00 - 1.49	7	5	162,633	186,015	67	58	8	1	1	57,290	9,541
1.50 - 1.99	5	5	303,935	311,740	109	89	19	1	-----	78,260	25,186
2.00 - 2.49	1	1	305,365	337,985	120	115	5	-----	-----	136,178	13,289
3.00 - 6.99	1	1									
Unclassified	1	1	-----	-----	-----	-----	-----	-----	-----	-----	-----
Other States, total	25	19	897,382	979,106	410	374	50	6	3	303,533	56,294
Less than 0.20	2	2	5,294	16,434	18	15	1	2	-----	9,778	440
0.20 - 0.39	1	1									
0.40 - 0.59	3	3	48,666	80,790	75	71	4	-----	-----	33,204	5,750
0.60 - 0.79	1	1									
0.80 - 0.99	5	3	162,631	207,803	100	94	6	-----	-----	90,620	15,969
1.00 - 1.49	3	2	37,902	45,496	18	15	3	-----	-----	16,094	5,100
1.50 - 1.99	4	2	581,212	548,849	142	129	9	4	3	116,894	21,533
2.00 - 2.49	2	2									
2.50 - 2.99	1	1	61,677	79,734	57	50	7	-----	-----	36,743	7,502
Unclassified	3	3									

<sup>1</sup> For definition of the industry see tables 88 and 89, footnote 1. Reports classified by output per man-hour represent a single quarry or mine, or a single preparation plant, or a single quarry or mine and a single preparation plant reported together. Statistics shown for "Unclassified" represent reports on which figures were not adequately reported for classification.

TABLE 104.—PRINCIPAL STATISTICS FOR ROUGH-DIMENSION SANDSTONE OPERATIONS IN THE UNITED STATES, BY STATE: 1939<sup>1</sup>

ITEM	United States	California	Maryland	New York	Ohio	Pennsylvania	South Dakota	Tennessee	Other States
Number of operating companies	57	4	4	11	6	6	3	4	19
Number of quarries	59	4	4	12	7	6	3	4	19
Number of preparation plants (crushing, screening, washing, and storage)	5	1	—	1	—	1	—	1	1
Number of persons engaged, total	670	35	71	50	203	47	12	42	210
Wage earners (average for the year)	603	30	64	41	197	38	8	36	169
Salaried employees	34	3	2	1	4	6	1	6	11
Proprietors and firm members	33	2	5	8	2	3	3	—	10
Performing manual labor	13	2	1	3	1	2	2	—	2
Production of sandstone:									
Tons of 2,000 pounds	772,247	27,122	45,448	15,310	135,908	20,470	1,825	11,115	515,049
Value at quarries	\$1,491,745	\$50,046	\$68,959	\$94,176	\$528,891	\$49,603	\$22,563	\$60,968	\$616,539
Value of all products	\$1,514,729	\$70,228	\$69,744	\$94,176	\$528,891	\$49,603	\$22,738	\$60,968	\$618,361
Principal expenses designated below, total	\$942,198	\$41,106	\$56,798	\$51,608	\$334,684	\$47,948	\$17,661	\$33,155	\$359,236
Wages	\$586,909	\$27,434	\$30,457	\$38,845	\$183,609	\$32,186	\$6,445	\$19,542	\$228,391
Salaries	\$56,452	\$4,300	\$3,640	\$2,300	\$7,584	\$6,500	\$2,000	\$9,766	\$20,162
Supplies and materials	\$225,288	\$4,087	\$9,041	\$2,004	\$114,415	\$4,356	\$5,011	\$2,266	\$82,128
Fuel	\$56,446	\$1,714	\$8,041	\$5,240	\$12,684	\$3,307	\$3,328	\$650	\$21,484
Purchased electric energy	\$51,901	\$3,391	\$137	\$1,499	\$16,392	\$1,599	\$879	\$931	\$7,073
Contract work	\$7,202	—	\$5,482	\$1,720	—	—	—	—	—
Cost of buildings, machinery, and equipment erected or installed during year	\$23,440	\$200	\$300	\$703	\$13,954	—	\$10	—	\$8,273
Buildings	\$210	—	—	—	—	—	—	—	\$200
Machinery and equipment, total	\$23,230	\$200	\$300	\$703	\$13,954	—	\$10	—	\$8,073
Purchased in new condition	\$13,204	—	—	\$703	\$6,232	—	—	—	\$6,269
Purchased in used condition	\$10,026	\$200	\$300	—	\$7,722	—	—	—	\$1,804
Total number of man-shifts worked by wage earners	142,130	9,162	17,127	9,073	44,854	9,065	1,860	7,677	45,312
Total number of man-hours worked by wage earners	1,141,194	73,294	139,391	73,969	359,162	73,405	14,024	61,418	546,531
Average number of hours worked per shift	8.0	8.0	8.1	8.2	8.0	8.1	7.5	8.0	8.0
Average hourly earning of wage earners	\$0.50	\$0.37	\$0.22	\$0.53	\$0.51	\$0.44	\$0.46	\$0.32	\$0.66
Tons of sandstone produced per man-hour	0.68	0.37	0.33	0.21	0.38	0.28	0.13	0.18	1.49
Average number of equivalent full days operations were active	223	278	272	133	224	210	233	213	231
Horsepower rating of power equipment, total	10,511	1,560	524	1,088	4,102	519	180	207	2,351
Per wage earner	17.4	52.0	8.2	26.5	20.8	13.7	22.5	5.8	12.3
Stationary equipment <sup>4</sup>	6,918	830	42	543	3,391	198	180	207	1,527
Mobile equipment <sup>5</sup>	3,593	730	482	545	711	321	—	—	824
Electric energy consumed (thousands of kw.-hrs.), total	1,474	210	4	46	855	72	24	39	244
Purchased	1,450	210	4	46	811	72	24	39	244
Generated by reporting companies	24	—	—	—	24	—	—	—	—

<sup>1</sup> For definition of the industry see table 88, footnote 1. Tables 104 through 117 cover only those operations that were engaged principally in the production of rough-dimension sandstone.

<sup>2</sup> Represents statistics for two quarries in Arizona, Kentucky, New Jersey, Virginia, Washington, and Wisconsin and for one quarry in Alabama, Colorado, Connecticut, Massachusetts, North Carolina, Oregon, and West Virginia.

<sup>3</sup> Figures represent weights and values of rough- rather than dressed-dimension stone; they include 38,002 short tons of crushed and broken sandstone, valued at \$28,269 and 2,280 short tons of natural abrasives valued at \$18,328 produced by quarries engaged principally in the production of rough-dimension stone. All operations were open quarries.

<sup>4</sup> Aggregate horsepower rating of engines, motors, etc. used for driving stationary or fixed equipment such as hoists, screens, crushers, compressors, etc.

<sup>5</sup> Aggregate horsepower rating of engines, motors, etc. used for driving mobile equipment such as power shovels, locomotives, trucks, tractors, churn drills, etc.

TABLE 105.—QUANTITY AND VALUE OF PRODUCTS OF ROUGH-DIMENSION SANDSTONE OPERATIONS IN THE UNITED STATES, BY TYPE OF PRODUCT AND BY STATE: 1932<sup>1</sup>

TYPE OF PRODUCT	UNITED STATES		CALIFORNIA		MARYLAND		NEW YORK	
	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value
All products, total-----	( <sup>2</sup> )	\$1,514,729	( <sup>2</sup> )	\$70,228	( <sup>2</sup> )	\$69,744	15,310	\$94,176
All sandstone produced, total <sup>3</sup> -----	772,247	1,491,745	27,122	50,045	45,448	68,959	15,310	94,176
Rough-dimension sandstone, total-----	607,807	778,990	15,561	32,300	42,231	65,286	3,438	11,424
For use in construction:								
Irregular-shaped stone for buildings, foundations, sea walls, bridges, etc.	513,820	509,584	4,297	20,767	5,676	17,233	850	690
Rubble (cellar foundations, retaining walls, and similar low-priced stone)	54,623	73,813	11,264	11,533	32,271	33,446	1,481	2,762
For architecture (buildings and other high-class construction work)	30,588	117,451					1,607	7,972
For monuments and mausoleums	3,795	55,078						
Other uses	4,981	23,054			4,284	14,607		
Dressed-dimension sandstone, including sawed, cut, and split stone, total-----	114,033	979,458	1,495	8,054	3,126	4,538	10,118	141,205
For use in construction or architecture (walls, roofing, foundations, bridges, etc.)	33,189	414,229					836	45,751
For monuments and mausoleums	1,581	43,043						
Paving blocks	651	6,124					651	6,124
Curbing	26,090	147,468					6,297	52,151
Flagging and floors or walkway slabs	23,631	161,493	1,495	8,054	3,126	4,538	1,321	8,967
Mill stock (blocks, slabs, or pieces)	26,639	171,809					768	25,412
Other uses	2,272	35,292					245	2,800
Rough blocks used to produce dressed-dimension sandstone-----	124,158	666,158	1,495	8,054	3,217	3,673	10,712	79,996
Crushed, broken, and ground sandstone, total-----	38,002	28,269	10,066	9,692			1,160	2,756
Riprap	25,430	13,958						
Concrete and road metal	11,648	12,222	9,531	9,157				
Refractory (ganister, mica schist, etc.)	189	554						
For cement manufacture	100	500						
Other uses	635	1,035	535	535				
Natural abrasives-----	2,280	18,328						
Secondary products (sand and gravel, foundry sand, and mica)	( <sup>2</sup> )	2,017						
Receipts for services performed for others-----	( <sup>2</sup> )	20,967	( <sup>2</sup> )	20,182	( <sup>2</sup> )	785		

  

TYPE OF PRODUCT	OHIO		PENNSYLVANIA		SOUTH DAKOTA		TENNESSEE		OTHER STATES	
	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value
All products, total-----	135,908	\$528,891	20,470	\$49,603	( <sup>2</sup> )	\$22,738	11,115	\$60,968	( <sup>2</sup> )	\$618,331
All sandstone produced, total <sup>3</sup> -----	135,908	528,891	20,470	49,603	1,825	22,563	11,115	60,968	515,049	616,539
Rough-dimension sandstone, total-----	30,219	115,315	15,775	34,270	125	5,563	4,168	25,837	496,290	488,995
For use in construction:										
Irregular-shaped stone for buildings, foundations, sea walls, bridges, etc.	6,426	16,704	7,580	12,950					489,491	441,240
Rubble (cellar foundations, retaining walls, and similar low-priced stone)	631	2,066	4,353	8,357			1,010	5,543	3,613	10,106
For architecture (buildings and other high-class construction work)	19,492	47,030	3,842	12,968			3,024	16,927	2,623	32,559
For monuments and mausoleums	3,670	49,515			125	5,563	134	3,367	563	5,090
Other uses										
Dressed-dimension sandstone, including sawed, cut, and split stone, total-----	84,549	552,657	1,879	12,603	850	30,000	5,120	52,572	6,896	177,829
For use in construction or architecture (walls, roofing, foundations, bridges, etc.)	27,980	216,470			850	30,000			3,503	122,008
For monuments and mausoleums	1,575	42,543							6	500
Paving blocks			270	2,905						
Curbing	19,523	92,412	1,609	9,698			5,111	52,117	404	6,349
Flagging and floors or walkway slabs	10,565	71,770							2,424	30,048
Mill stock (blocks, slabs, or pieces)	23,447	116,349					9	455	559	18,924
Other uses	1,459	13,113								
Rough blocks used to produce dressed-dimension sandstone-----	88,701	393,700	2,118	11,172	1,700	17,000	6,747	34,131	9,468	118,432
Crushed, broken, and ground sandstone, total-----	14,941	3,734	2,577	4,161			200	1,000	9,058	6,926
Riprap	14,941	3,734	510	1,159					8,819	6,309
Concrete and road metal			2,067	3,002					50	63
Refractory (ganister, mica schist, etc.)							100	500	189	554
For cement manufacture							100	500		
Other uses										
Natural abrasives-----	2,047	16,142							233	2,186
Secondary products (sand and gravel, foundry sand, and mica)					( <sup>2</sup> )	175			( <sup>2</sup> )	1,842
Receipts for services performed for others-----										

<sup>1</sup>For definition of the industry see tables 88 and 104, footnote 1.<sup>2</sup>Not significant.<sup>3</sup>Represents the sum of "Rough-dimension sandstone," "Rough blocks used to produce dressed-dimension sandstone," "Crushed, broken, and ground sandstone," and "Natural abrasives."

## MINERAL INDUSTRIES

TABLE 106.—NUMBER OF WAGE EARNERS AT ROUGH-DIMENSION SANDSTONE OPERATIONS IN THE UNITED STATES, BY TYPE OF OPERATION; BY STATE, AND BY MONTH: 1939<sup>1</sup>

STATE AND TYPE OF OPERATION	Average for the 12 months	NUMBER RECEIVING PAY DURING PAY-ROLL PERIOD ENDING NEAREST THE 15TH OF THE MONTH											
		January	February	March	April	May	June	July	August	September	October	November	December
United States, total	603	429	435	542	634	661	661	657	704	694	654	623	549
TYPE OF OPERATION													
Quarries only	564	397	402	506	599	619	620	614	664	643	611	581	509
Quarries and preparation plants operated together	39	32	31	36	35	42	41	43	40	51	43	42	40
STATE													
California	30	16	18	19	32	31	33	35	28	38	31	37	37
Maryland	64	55	53	55	60	67	72	75	85	75	62	59	47
New York	41	15	15	16	35	53	61	62	67	59	53	41	12
Ohio	197	137	160	199	218	212	214	208	220	210	200	181	181
Pennsylvania	38	29	26	40	42	43	41	35	36	36	41	45	46
South Dakota	8	7	7	7	8	6	8	8	6	6	8	8	8
Tennessee	36	30	26	37	40	39	33	34	38	44	39	38	39
Other States	189	110	128	169	199	208	199	200	222	224	220	214	179

<sup>1</sup>For definition of the industry see tables 88 and 104, footnote 1.TABLE 107.—EMPLOYMENT AND WORKING TIME AT ROUGH-DIMENSION SANDSTONE OPERATIONS IN THE UNITED STATES, BY DEPARTMENT AND BY STATE: 1939<sup>1</sup>

DEPARTMENT	United States	California	Maryland	New York	Ohio	Pennsylvania	South Dakota	Tennessee	Other States
Average number of wage earners on active days, total	636	33	65	66	200	43	8	36	187
At quarries, total	625	29	65	66	200	39	8	35	185
Open-cut	608	29	65	53	198	39	8	35	185
Surface shops and yards	17			13	2				2
At preparation plants	11	4				4		1	2
Average number of equivalent full days operations were active	223	278	272	135	224	210	233	213	231
At quarries, total	222	273	272	135	224	205	233	219	232
Open-cut	225	273	272	138	224	205	233	219	231
Surface shops and yards	145			112	244				263
At preparation plants	235	308				251		26	153
Number of man-shifts worked by wage earners, total <sup>2</sup>	142,130	9,162	17,127	9,073	44,854	9,065	1,860	7,577	43,312
On active days, total	141,627	9,162	17,127	8,776	44,854	9,015	1,860	7,577	43,156
At quarries, total	139,061	7,950	17,127	8,776	44,854	8,013	1,860	7,551	42,850
Open-cut	136,595	7,950	17,127	7,324	44,558	8,013	1,860	7,551	42,324
Surface shops and yards	2,466			1,452	488				526
At preparation plants	2,566	1,232				1,002		26	508
On inactive days	503			297		50			158
Number of man-hours worked by wage earners, total	1,141,194	75,294	139,391	73,969	359,162	73,405	14,024	61,418	346,531
On active days, total	1,137,178	75,294	139,391	71,599	359,162	73,005	14,024	61,418	345,283
At quarries, total	1,116,644	63,438	139,391	71,599	359,162	64,989	14,024	61,206	342,835
Open-cut	1,096,898	63,438	139,391	59,974	355,259	64,989	14,024	61,206	338,607
Surface shops and yards	19,756			11,625	3,903				4,228
At preparation plants	20,532	9,856				8,016		212	2,448
On inactive days	4,018			2,370		400			1,248

<sup>1</sup>For definition of the industry see tables 88 and 104, footnote 1.<sup>2</sup>All man-shifts were reported worked during the first shift.TABLE 108.—QUANTITY OF FUEL AND ELECTRIC ENERGY CONSUMED AT ROUGH-DIMENSION SANDSTONE OPERATIONS IN THE UNITED STATES, BY TYPE OF OPERATION AND BY STATE: 1939<sup>1</sup>

TYPE OF OPERATION AND STATE	FUEL <sup>2</sup>				ELECTRIC ENERGY (thousands of kilowatt-hours)		
	Anthracite (tons of 2,000 pounds)	Bituminous coal (tons of 2,000 pounds)	Fuel oils (barrels of 42 gallons)	Gasoline and kerosene (gallons)	Total	Purchased	Generated by reporting companies
United States, total	78	5,114	9,808	153,811	1,474	1,450	24
TYPE OF OPERATION							
Quarries only	78	4,981	9,500	150,219	1,222	1,198	24
Quarries and preparation plants operated together		133	308	3,592	252	252	
STATE							
California		100	308	2,260	210	210	
Maryland				71,376	4	4	
New York				29,425	46	46	
Ohio	16	3,221		8,378	855	811	24
Pennsylvania	61	577		6,535	72	72	
South Dakota				22,173	24	24	
Tennessee		20		2,946	39	39	
Other States	1	1,070	9,500	10,924	244	244	

<sup>1</sup>For definition of the industry see tables 88 and 104, footnote 1.<sup>2</sup>No natural gas was reported consumed.

TABLE 109.—NUMBER AND HORSEPOWER RATING OF PRIME MOVERS AND ELECTRIC MOTORS AT ROUGH-DIMENSION SANDSTONE OPERATIONS IN THE UNITED STATES, BY TYPE OF OPERATION AND BY STATE: 1939<sup>1</sup>

TYPE OF OPERATION AND STATE	PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY							ELECTRIC MOTORS DRIVEN BY ENERGY GENERATED BY REPORTING COMPANIES	
	Aggregate horsepower	Prime movers				Electric motors driven by purchased energy		Number	Horsepower
		Total		Ordinarily idle (included in preceding columns)		Number	Horsepower		
		Number	Horsepower	Number	Horsepower				
United States, total-----	10,511	131	5,901	11	451	162	4,610	2	70
Stationary-----	6,918	36	2,332	4	185	159	4,586	2	70
Mobile-----	3,593	95	3,569	7	268	3	24		
TYPE OF OPERATION									
Quarries only, total-----	8,688	119	5,166	9	331	129	5,532	2	70
Stationary-----	5,820	35	2,312	4	185	126	3,508	2	70
Mobile-----	2,868	84	2,844	5	148	3	24		
Quarries and preparation plants operated together, total-----	1,823	12	745	2	120	33	1,078		
Stationary-----	1,098	1	20			33	1,078		
Mobile-----	725	11	725	2	120				
STATE									
California, total-----	1,580	11	730	2	120	18	850		
Stationary-----	830					18	850		
Mobile-----	730	11	730	2	120				
Maryland, total-----	524	15	514	3	86	1	10		
Stationary-----	42	1	32	1	28	1	10		
Mobile-----	482	14	482	2	58				
New York, total-----	1,088	27	695	3	90	14	393		
Stationary-----	543	6	150			14	393		
Mobile-----	545	21	545	3	90				
Ohio, total-----	4,102	29	2,136	1	100	57	1,966	2	70
Stationary-----	3,391	7	1,425	1	100	57	1,966	2	70
Mobile-----	711	22	711						
Pennsylvania, total-----	519	8	346			10	173		
Stationary-----	198	3	25			10	173		
Mobile-----	321	5	321						
South Dakota, total-----	180	2	55			5	125		
Stationary-----	180	2	55			5	125		
Mobile-----									
Tennessee, total-----	207	2	70			10	137		
Stationary-----	207	2	70			10	137		
Mobile-----									
Other States, total-----	2,331	37	1,355	2	55	47	976		
Stationary-----	1,527	15	575	2	55	44	952		
Mobile-----	804	22	780			3	24		

<sup>1</sup>For definition of the industry see tables 88 and 104, footnote 1.<sup>2</sup>Represents prime movers not driving generators.TABLE 110.—NUMBER OF POWER-LOADING MACHINES AT ROUGH-DIMENSION SANDSTONE OPERATIONS IN THE UNITED STATES, BY TYPE, BY KIND OF POWER USED, BY SIZE, AND BY STATE: 1939<sup>1</sup>

TYPE, KIND OF POWER USED, AND SIZE	United States	California	Maryland	New York	Ohio	Pennsylvania	South Dakota	Tennessee	Other States
Power shovels, total-----	20	2	2	3	7	1			5
Kind of power used:									
Steam-----	16	2		2	7	1			4
Internal-combustion engine-----	4		2	1					1
Dipper capacity (cu.-yds.):									
Less than 3-----	17	2	2	3	5				5
3 to 5-----	2				1	1			
More than 5-----	1				1				
Dragline excavators, total <sup>2</sup> -----	2			1					1
Kind of power used:									
Steam-----	1			1					
Internal-combustion engine-----	1								1
Clamshell and orange-peel loaders, total-----	2		1		1				
Kind of power used:									
Steam-----	1				1				
Internal-combustion engine-----	1		1						
Cranes and hoists, total-----	73			9	41	3	1	1	18
Kind of power used:									
Steam-----	23			2	11	3			7
Electric-----	35			4	30				1
Internal-combustion engine-----	15			3			1	1	10

<sup>1</sup>For definition of the industry see tables 88 and 104, footnote 1.<sup>2</sup>All had bucket capacities of less than 3 cubic yards.

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TABLE 111.—SELECTED STATISTICS FOR INCORPORATED AND UNINCORPORATED OPERATING COMPANIES ENGAGED IN ROUGH-DIMENSION SANDSTONE OPERATIONS IN THE UNITED STATES, BY STATE: 1939<sup>1</sup>

STATE AND TYPE OF OWNERSHIP	Number of operating companies	Number of quarries	Number of preparation plants	Production of sandstone (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED				Wages	Salaries
						Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members		
United States, total	57	59	5	772,247	\$1,514,729	670	603	34	33	\$566,909	\$56,452
Incorporated	25	27	3	218,949	859,453	381	358	23	-----	297,910	57,189
Unincorporated	32	32	2	553,298	655,276	289	245	11	33	268,999	19,263
California, total	4	4	1	27,122	70,228	35	30	3	2	27,434	4,500
Incorporated	1	1	1	27,122	70,228	35	30	3	2	27,434	4,500
Unincorporated	3	3	-----								
Maryland, total	4	4	-----	45,448	69,744	71	64	2	5	30,457	3,640
Incorporated	1	1	-----	45,448	69,744	71	64	2	5	30,457	3,640
Unincorporated	3	3	-----								
New York, total	11	12	1	15,310	94,176	50	41	1	8	38,845	2,300
Incorporated	3	4	-----	3,971	22,480	9	9	-----	-----	7,346	-----
Unincorporated	8	8	1	11,339	71,696	41	32	1	8	31,499	2,300
Ohio, total	6	7	-----	135,908	528,891	203	197	4	2	183,609	7,584
Incorporated	5	6	-----	135,908	528,891	203	197	4	2	183,609	7,584
Unincorporated	1	1	-----								
Pennsylvania, total	6	6	1	20,470	49,603	47	38	6	3	32,186	6,500
Incorporated	1	1	-----	20,470	49,603	47	38	6	3	32,186	6,500
Unincorporated	5	5	1								
South Dakota, total	3	3	-----	1,825	22,738	12	8	1	3	6,445	2,000
Incorporated	1	1	-----	1,825	22,738	12	8	1	3	6,445	2,000
Unincorporated	2	2	-----								
Tennessee <sup>2</sup>	4	4	1	11,115	60,968	42	36	6	-----	19,542	9,766
Other States, total	19	19	1	515,049	618,381	210	189	11	10	228,391	20,162
Incorporated	9	9	1	14,380	142,551	50	45	5	-----	38,646	7,639
Unincorporated	10	10	-----	500,669	475,830	160	144	6	10	189,745	12,463

<sup>1</sup> For definition of the industry see tables 88 and 104, footnote 1.<sup>2</sup> All companies were incorporated.TABLE 112.—SELECTED STATISTICS FOR ROUGH-DIMENSION SANDSTONE OPERATIONS IN THE UNITED STATES, CLASSIFIED BY VALUE OF PRODUCT AND BY STATE: 1939<sup>1</sup>

STATE AND VALUE OF PRODUCTS	Number of quarries	Number of preparation plants	Production of sandstone (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED					Wages	Salaries
					Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members			
								Total	Performing manual labor		
United States, total	59	5	772,247	\$1,514,729	670	603	34	33	13	\$566,909	\$56,452
\$1 - \$19,999	47	4	100,619	370,262	286	259	18	29	13	171,810	26,792
\$20,000 - \$49,999	7	1	80,330	243,848	123	113	9	1	-----	97,189	15,926
\$50,000 - \$99,999	1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
\$100,000 - \$249,999	2	-----	591,298	900,619	261	251	7	3	-----	287,910	13,734
\$250,000 - \$499,999	2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Ohio, total	7	-----	135,908	528,891	203	197	4	2	1	183,609	7,584
\$1 - \$19,999	3	-----	15,396	40,389	25	22	1	2	1	16,722	1,500
\$20,000 - \$49,999	2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
\$100,000 - \$249,999	1	-----	120,512	488,502	178	175	3	-----	-----	166,887	6,084
\$250,000 - \$499,999	1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Pennsylvania, total	6	1	20,470	49,603	47	38	6	3	2	32,186	6,500
\$1 - \$19,999	6	1	20,470	49,603	47	38	6	3	2	32,186	6,500
South Dakota, total	3	-----	1,825	22,738	12	8	1	3	2	6,445	2,000
\$1 - \$19,999	3	-----	1,825	22,738	12	8	1	3	2	6,445	2,000
Other States, total	43	4	614,044	913,497	408	360	23	25	8	344,669	40,368
\$1 - \$19,999	35	3	62,928	257,532	202	171	10	21	8	116,457	16,792
\$20,000 - \$49,999	5	1	-----	-----	-----	-----	-----	-----	-----	-----	-----
\$50,000 - \$99,999	1	-----	551,116	655,965	206	189	13	4	-----	228,212	25,576
\$100,000 - \$249,999	1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
\$250,000 - \$499,999	1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

<sup>1</sup> For definition of the industry see tables 88 and 104, footnote 1. Reports classified by value of products represent a single quarry or a single quarry and a single preparation plant reported together.

TABLE 113.—SELECTED STATISTICS FOR ROUGH-DIMENSION SANDSTONE OPERATIONS IN THE UNITED STATES,  
CLASSIFIED BY QUANTITY OF STONE PRODUCED AND BY STATE: 1939<sup>1</sup>

STATE AND TONS OF SANDSTONE (tons of 2,000 pounds)	Number of quarries	Number of preparation plants	Production of sand- stone (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED					Wages	Salaries
					Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members			
								Total	Performing manual labor		
United States, total	59	5	772,247	\$1,514,729	670	603	34	33	13	\$566,909	\$56,452
1 - 249	2		888	27,738	16	12	1	3	2	10,770	2,400
250 - 499	2	1									
500 - 999	10		7,144	57,780	36	29	2	5	4	23,187	2,900
1,000 - 1,999	14	1	17,315	93,165	70	59	4	7	2	36,186	6,460
2,000 - 2,999	9		21,646	145,048	69	59	5	5	2	52,350	4,599
3,000 - 4,999	6		23,689	89,709	45	38	1	6	3	47,766	2,000
5,000 - 9,999	8	1	51,804	172,436	96	86	7	3		60,888	11,586
10,000 - 24,999	1	1									
25,000 - 49,999	2		96,680	199,711	80	74	6			48,073	10,144
50,000 and over	3										
Unclassified	2	1	553,081	729,142	258	246	8	4		287,709	16,363
New York, total	12	1	15,310	94,176	50	41	1	8	3	38,845	2,300
500 - 999	3		1,760	15,942	9	8		1	1	8,351	
1,000 - 1,999	8	1									
3,000 - 4,999	1		13,550	78,234	41	33	1	7	2	30,494	2,300
Other States, total	47	4	756,937	1,420,553	620	562	33	25	10	528,064	54,152
1 - 249	2		888	27,738	16	12	1	3	2	10,770	2,400
250 - 499	2	1									
500 - 999	7		5,384	41,838	27	21	2	4	3	14,816	2,900
1,000 - 1,999	6		( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
2,000 - 2,999	9		21,646	145,048	69	59	5	5	2	52,350	4,599
3,000 - 4,999	5		<sup>2</sup> 27,454	<sup>2</sup> 104,640	<sup>2</sup> 74	<sup>2</sup> 64	<sup>2</sup> 4	<sup>2</sup> 6	<sup>2</sup> 3	<sup>2</sup> 53,458	<sup>2</sup> 6,160
5,000 - 9,999	8	1	51,804	172,436	96	86	7	3		60,888	11,586
10,000 - 24,999	1	1									
25,000 - 49,999	2		96,680	199,711	80	74	6			48,073	10,144
50,000 and over	3										
Unclassified	2	1	553,081	729,142	258	246	8	4		287,709	16,363

<sup>1</sup> For definition of the industry see tables 88 and 104, footnote 1. Reports classified by quantity of sandstone produced represent a single quarry or a single quarry and a single preparation plant reported together. Statistics shown for "Unclassified" represent reports on which figures were not adequately reported for classification.

<sup>2</sup> Statistics for operations classified in the 1,000 - 1,999 class interval are included with those for operations classified in the 3,000 - 4,999 class interval.

TABLE 114.—SELECTED STATISTICS FOR ROUGH-DIMENSION SANDSTONE OPERATIONS IN THE UNITED STATES,  
CLASSIFIED BY NUMBER OF WAGE EARNERS: 1939<sup>1</sup>

NUMBER OF WAGE EARNERS	Number of quarries	Number of preparation plants	Production of sand- stone (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED					Wages	Salaries
					Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members			
								Total	Performing manual labor		
United States, total	59	5	772,247	\$1,514,729	670	603	34	33	13	\$566,909	\$56,452
1 - 5	27	2	36,693	176,234	109	84	7	18	10	71,200	11,900
6 - 20	26	3	158,011	572,517	278	247	20	11	2	194,476	29,581
21 - 50	2		510,660	446,966	144	134	7	3		165,930	14,971
51 - 100	1										
101 - 250	1										
Unclassified	2		66,883	319,012	139	138		1	1	135,303	

<sup>1</sup> For definition of the industry see tables 88 and 104, footnote 1. Reports classified by average number of wage earners employed during the year represent a single quarry, or a single quarry and a single preparation plant reported together. Statistics shown for "Unclassified" represent reports on which number of wage earners, by month, was not adequately reported.

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TABLE 115.—SELECTED STATISTICS FOR ROUGH-DIMENSION SANDSTONE OPERATIONS IN THE UNITED STATES, CLASSIFIED BY NUMBER OF HOURS PER WAGE EARNER IN THE FULL-TIME WORKWEEK AND BY STATE: 1939<sup>1</sup>

STATE AND HOURS PER WEEK	Number of quarries	Number of preparation plants	Production of sandstone (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED					Wages	Salaries
					Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members			
								Total	Performing manual labor		
United States, total	59	5	772,247	\$1,514,729	670	603	34	33	13	\$566,909	\$56,452
1 - 34	1										
35	1										
40	13	1	113,918	530,567	257	246	8	3		216,533	13,946
41 - 42	7										
43 - 44	12	2	53,657	234,151	56	50	2	4	2	45,628	2,403
45 - 47	2										
48	7										
49 - 55	1										
Unclassified	15	2	43,570	148,096	95	81	8	6	4	66,533	11,932
New York, total	12	1	15,310	94,176	50	41	1	8	3	38,845	2,300
35	1										
40	1										
41 - 42	1		2,746	15,968	12	11		1		7,982	
43 - 44	4										
48	2										
Unclassified	3	1	2,851	19,157	12	10	1	1	1	9,497	2,300
Pennsylvania, total	6	1	20,470	49,603	47	38	6	3	2	32,186	6,500
40	1										
43 - 44	2	1	11,592	26,597	22	18	3	1	1	15,436	3,500
48	1										
Unclassified	2		8,878	23,206	25	20	3	2	1	16,750	3,000
Other States, total	41	3	736,467	1,370,950	573	524	27	22	8	495,678	47,652
1 - 34	1										
40	11	1	109,855	513,079	242	233	7	2		206,880	12,046
41 - 42	6										
43 - 44	6	1	2 90,516	2 342,070	2 117	2 102	2 7	2 8	2 4	2 86,961	2 10,055
45 - 47	2										
48	4										
49 - 55	1										
Unclassified	10	1	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )

<sup>1</sup> For definition of the industry see tables 88 and 104, footnote 1. Reports were classified by number of hours in the full-time workweek reported for wage earners in that department of the operation for which the largest number of man-hours worked was reported. Statistics shown for "Unclassified" represent reports on which number of hours was not reported.

<sup>2</sup> Statistics shown for operations classified in the 41 to 42 class interval included those for "Unclassified" operations.

TABLE 116.—SELECTED STATISTICS FOR ROUGH-DIMENSION SANDSTONE OPERATIONS IN THE UNITED STATES, CLASSIFIED BY NUMBER OF DAYS ACTIVE DURING THE YEAR: 1939<sup>1</sup>

NUMBER OF DAYS ACTIVE DURING YEAR	Number of quarries	Number of preparation plants	Production of sandstone (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED					Wages	Salaries
					Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members			
								Total	Performing manual labor		
United States, total	59	5	772,247	\$1,514,729	670	603	34	33	13	\$566,909	\$56,452
1 - 49	1										
50 - 99	4										
100 - 149	7		5,839	28,259	13	14	1	1		6,955	2,300
150 - 199	12	2	12,330	59,709	41	33	3	5	4	25,597	4,600
200 - 224	3		18,485	100,162	68	58	3	7	3	50,281	5,700
225 - 249	8	1	5,723	27,391	14	11	1	2	2	9,705	2,000
250 - 274	3	1	131,259	535,064	211	204	3	4	1	193,168	5,710
275 - 299	12	1	46,244	161,789	102	88	11	3	1	69,845	15,140
300 - 324	6										
Unclassified	2	1	541,975	579,697	194	174	11	9	2	201,335	19,870
Unclassified	4		10,412	22,658	24	21	1	2		10,023	1,132

<sup>1</sup> For definition of the industry see tables 88 and 104, footnote 1. Reports classified by number of days active represent a single quarry, or a single quarry and a single preparation plant reported together; such reports were classified by number of days the quarry was in operation for production or development purposes during the year. Statistics shown for "Unclassified" represent reports on which number of days active was not reported.

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TABLE 117.—SELECTED STATISTICS FOR ROUGH-DIMENSION SANDSTONE OPERATIONS IN THE UNITED STATES, CLASSIFIED BY OUTPUT PER MAN-HOUR AND BY STATE: 1939<sup>1</sup>

STATE AND TONS OF SANDSTONE PER MAN-HOUR (tons of 2,000 pounds)	Number of quarries	Number of preparation plants	Production of sand- stone (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED					Wages	Salaries
					Total	Wage earners (average for the year)	Salaries employees	Proprietors and firm members			
								Total	Performing manual labor		
United States, total	59	5	772,247	\$1,514,729	670	603	34	33	13	\$566,909	\$56,452
Less than 0.050	2	1									
0.050 - 0.099	3		2,528	40,792	29	24	2	3	2	17,895	2,760
0.100 - 0.149	7	1	11,178	64,069	52	45	3	4	2	43,409	3,800
0.150 - 0.199	5		9,254	52,996	32	27	2	3		32,937	2,900
0.200 - 0.299	12		91,483	506,082	207	200	4	3		188,544	5,799
0.300 - 0.399	11	1	77,139	201,805	150	116	7	7	3	71,772	12,726
0.400 - 0.599	6		18,780	31,897	26	19	3	4	2	16,619	3,300
0.600 - 0.799	1										
0.800 - 0.999	1										
1.000 - 1.499	1		525,985	523,957	124	113	6	5	1	161,158	13,335
1.500 and over	2										
Unclassified	9	2	35,900	95,131	70	59	7	4	1	34,575	11,832
New York, total	12	1	15,310	94,176	50	41	1	8	3	38,845	2,300
0.100 - 0.149	3	1	3,180	14,713	17	13		4	2	13,210	
0.150 - 0.199	1										
0.200 - 0.299	2		7,326	55,593	22	20		2	1	21,267	
0.300 - 0.399	2										
0.400 - 0.599	2		4,804	23,870	11	8	1	2		4,366	2,300
Unclassified	2										
Ohio, total	7		135,908	528,891	203	197	4	2	1	183,609	7,584
0.200 - 0.299	3		76,917	351,559	162	161	1			152,332	1,500
0.300 - 0.399	2										
0.600 - 0.799	1		58,991	177,332	41	36	3	2	1	31,277	6,084
1.000 - 1.499	1										
Pennsylvania, total	6	1	20,470	49,603	47	58	6	3	2	32,186	6,500
0.050 - 0.099	1										
0.100 - 0.149	1		5,177	22,540	25	21	3	1	1	17,174	3,900
0.200 - 0.299	1										
0.300 - 0.399	1	1	15,293	27,063	22	17	3	2	1	15,012	2,600
0.400 - 0.599	2										
Other States, total	34	3	600,559	842,059	370	327	23	20	7	312,269	40,068
Less than 0.050	2	1									
0.050 - 0.099	2		1,930	35,650	24	20	2	2	1	15,145	2,760
0.100 - 0.149	3										
0.150 - 0.199	4		13,990	86,474	50	44	3	3		50,363	4,700
0.200 - 0.299	6		7,745	107,477	24	19	2	3	2	16,229	2,399
0.300 - 0.399	6		56,535	122,342	96	87	4	5	2	44,989	7,546
0.400 - 0.599	2										
1.500 and over	2		486,677	415,278	112	102	6	4	1	152,536	13,331
Unclassified	7	2	33,682	74,836	64	55	6	3	1	32,987	9,532

<sup>1</sup>For definition of the industry see tables 88 and 104, footnote 1. Reports classified by output per man-hour represent a single quarry or a single quarry and a single preparation plant reported together. Statistics shown for "Unclassified" represent reports on which figures were not adequately reported for classification.

## Slate

Slate quarries and mines in the United States had an output in 1939 valued at \$4,163,000 at points of production. These quarries and mines produced 684,000 short tons of slate, of which 308,000 tons were crushed slate (granules and flour) and 376,000 tons were rough-dimension blocks and slabs.

Slate is a dense, fine-grained, crystalline rock produced by the metamorphism of clays and shales. It has a characteristic cleavage which permits ready splitting into thin, smooth sheets. Slate is among the most durable of building materials, and has a high resistance to electricity. The slabs are used for roofing, mantels, floor tiles, steps, flagging, sanitary ware, electric panels and switchboards, blackboards, and various other purposes. Slate granules are widely used in the manufacture of coated roofing materials; pulverized slate, known as "flour," is used as a filler in paints, road asphalt-surface mixtures, roofing mastic, and other products.

### PRINCIPAL EXPENSES

The industry employed an average of 1,341 wage earners in 1939 and paid a total of \$1,252,000 in wages. Salaried employees, numbering 115 in October, were paid \$232,000. Expenditures during the year for supplies and materials totaled \$881,000; for fuel, \$113,000; and for purchased electric energy, \$242,000. The amount spent for work done on contract by other concerns was \$28,000. These expenses totaled \$2,747,000. Buildings were erected and machinery and equipment were installed during the year at a cost of \$78,000.

### PRODUCTION

The 1939 output of 684,000 short tons of slate was produced by 79 operations located in 10 States. Crushed slate was produced in nine States and rough-dimension blocks and slabs in six. Pennsylvania and Vermont accounted for almost two-thirds of the total quantity of crushed slate produced. Pennsylvania was the most important source of rough-dimension blocks and slabs, accounting for 60 percent of the total production. Vermont was second with 23 percent and Virginia third with 11 percent. Less than 2 percent of crushed slate and 3 percent of the rough blocks and slabs were produced from underground mines.

### EMPLOYMENT AND WORKING TIME

The average of 1,341 wage earners employed in the industry in 1939 worked a total of 2,611,000 man-hours—1,808,000 at rough-dimension slate operations and 803,000 at crushed-slate operations. The average number of hours worked per shift was 8.1 at dimension-slate and 7.9 at crushed-slate operations.

Crushed-slate operations employed an average of 407 wage earners; 934 wage earners were employed at dimension-slate operations—465 in Pennsylvania, 287 in Vermont, 131 in Virginia, 11 in New York, and 40 in Maine and California. Monthly employment at crushed-slate operations ranged from 346 in January to a peak of 448 in October. At dimension-slate opera-

tions a low of 790 wage earners was reported for February and a peak of 1,018 for August.

Crushed-slate operations were active the equivalent of 230 full days during the year. Dimension-slate operations were active 227 full days, with those in Vermont averaging 243; Pennsylvania, 223; and New York, 175. Except for two quarries which worked two shifts per day during part of the year, the slate industry operated on a one-shift basis throughout the year.

The number of tons of stone produced per man-hour worked by wage earners was 0.38 short ton at crushed-slate operations and 0.21 at dimension-slate operations. The range of output per man-hour at dimension-stone operations was wide, operations in New York averaging 0.51 ton and those in Vermont 0.15 ton. Operations in Pennsylvania averaged 0.26 ton per man-hour.

Wage payments per man-hour worked by wage earners at crushed-slate operations averaged 53 cents; the average for dimension-slate operations was 46 cents, and varied from 52 cents in Pennsylvania to 35 cents in New York.

### POWER EQUIPMENT

Power equipment available for use at slate quarries and mines at the end of 1939, including idle equipment, had an aggregate rated capacity of 30,000 horsepower. About 80 percent of the total horsepower reported was for driving stationary equipment such as hoists, screens, crushers, and compressors. The remainder was for driving mobile equipment such as power shovels, locomotives, trucks, tractors, channelers, and wire saws. The aggregate horsepower rating of equipment at crushed-slate operations was 13,000, of which 94 percent was for stationary equipment. Of the 17,000 horsepower at dimension-slate operations, 70 percent was for stationary equipment. The horsepower rating of power equipment per wage earner was 31 at crushed-slate and 18 at dimension-slate operations.

The slate industry consumed 14,886,000 kilowatt-hours of electricity in 1939, of which less than 1 percent was generated by the reporting companies for their own use. Crushed-slate operations accounted for 70 percent of the electric energy consumed and dimension-slate operations for the remainder.

Power loading machines available for use at slate operations at the end of the year totaled 81 units of all types, and included 32 power shovels, 22 cableways, and 20 cranes and hoists. All of the power shovels reported had a dipper capacity of less than 3 cubic yards. Of the three dragline excavators, one had a bucket capacity of less than 3 cubic yards and two had a capacity of 3 to 5 cubic yards. The one scraper loader reported was employed in an underground mine and had a horsepower rating of 28 to 100. Seventeen of the power shovels and 12 of the cranes and hoists were steam-driven.

The statistics summarized in this report for 1939 cover operations engaged primarily in the production of crushed slate and rough-dimension slate. They do not cover operations engaged in cutting, shaping, polishing, and otherwise finishing the rough blocks and slabs; statistics for such operations are included in reports for the stone-manufacturing industries.

TABLE 118.—PRINCIPAL STATISTICS FOR THE SLATE INDUSTRY IN THE UNITED STATES: 1939, 1929, 1919, 1909, 1902, 1889, AND 1880<sup>1</sup>  
(For producing operations only)

ITEM	1939	1929	1919	1909	1902	1889	1880
Number of operating companies <sup>2</sup> .....	70	(3)	(3)	185	174	(3)	(3)
Number of quarries and mines.....	79	130	104	219	199	212	94
Production of slate (tons of 2,000 pounds).....	683,900	682,000	409,000	(3)	(3)	(3)	(3)
Value of products, total.....	\$4,162,547	\$10,486,390	\$5,720,792	\$6,054,174	\$5,696,051	\$3,482,513	\$1,529,985
Slate produced.....	\$4,156,885	\$10,486,390	\$5,720,054	(3)	\$5,696,051	\$3,482,513	\$1,529,985
Other products and services rendered.....	\$5,662	(3)	\$738	(3)	(3)	(3)	(3)
Number of persons engaged, total.....	1,516	4,458	3,852	9,486	6,357	6,170	3,033
Wage earners (average for the year, including inactive periods).....	1,341	4,098	3,513	8,803	5,920	5,874	3,033
Salaried employees.....	115	274	275	462	437	296	(3)
Proprietors and firm members.....	60	86	64	221	(3)	(3)	(3)
Performing manual labor.....	33	(3)	21	70	(3)	(3)	(3)
Principal expenses designated below, total.....	\$2,747,448	\$6,954,091	\$4,685,055	\$5,372,252	\$4,192,699	\$2,501,096	(3)
Wages.....	\$1,251,707	\$4,884,038	\$3,128,249	\$4,068,653	\$3,177,459	\$2,218,982	(3)
Salaries.....	231,572	376,824	3409,255	\$405,479	334,879	(3)	(3)
Supplies and materials.....	\$881,234	\$662,441	\$632,459	\$521,761	(3)	(3)	\$32,799
Fuel.....	2113,153	\$192,247	\$228,954	\$327,397	\$680,361	\$282,114	(3)
Purchased electric energy.....	\$241,805	\$441,967	\$188,505	(3)	(3)	(3)	(3)
Contract work.....	\$27,977	\$26,574	\$95,633	\$28,962	(3)	(3)	(3)
Cost of machinery and equipment erected or installed during year.....	\$72,472	\$206,983	(3)	(3)	(3)	(3)	(3)
Horsepower rating of power equipment, total.....	29,554	33,817	20,813	25,777	25,454	12,037	(3)
Per wage earner.....	22.0	8.3	5.9	3.4	4.3	2.0	(3)
Prime movers.....	6,945	7,941	8,778	27,769	25,259	(3)	(3)
Electric motors driven by purchased energy.....	22,609	25,876	11,635	2,008	195	(3)	(3)
Horsepower rating of electric motors driven by energy generated by reporting companies.....	250	75	44	50	30	(3)	(3)
Fuels consumed:							
Anthracite (tons of 2,000 pounds).....	199	2,748	9,813	(3)	(3)	(3)	(3)
Bituminous coal (tons of 2,000 pounds).....	14,508	34,368	34,053	(3)	(3)	(3)	(3)
Fuel oils (barrels of 42 gallons).....	3,225	2,172	36	(3)	(3)	(3)	(3)
Gasoline and kerosene (gallons).....	159,817	28,730	42	(3)	(3)	(3)	(3)
Natural gas (thousands of cubic feet).....	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Electric energy consumed (thousands of kw.-hrs.), total.....	14,686	19,470	(3)	(3)	(3)	(3)	(3)
Purchased.....	14,650	18,798	(3)	(3)	(3)	(3)	(3)
Generated by reporting companies.....	36	672	(3)	(3)	(3)	(3)	(3)

<sup>1</sup> Statistics represent the production of rough-dimension slate and crushed slate (granules and flour). Statistics for 1939 include only those operations (quarries, mines, crushing, screening, or washing plants, or quarries or mines and plants operated together) whose total value of products; designated principal expenses; or cost of buildings, machinery, and equipment erected or installed during the year was at least \$2,500. Figures for 1929 exclude statistics for enterprises "whose output was valued at less than \$2,500; or if not productive, in which development work costing less than \$2,500 was done." For 1919, "enterprises producing less than \$500 worth of products or ... operations confined to development work on which expenditures amounted to less than \$5,000 during the ... year were ... omitted." No minimum was placed on the size of operations in 1909, 1902, 1889, and 1880. Statistics cover quarrying, stone crushing, and rough-dimension-stone trimming operations; other dimension-stone dressing is excluded. In 1929 and earlier years, figures include some dimension-stone dressing at some operations engaged in both quarrying and dressing dimension stone for which products data could not be segregated. In 1929 operators who included dimension-stone dressing activities in their reports produced 232,321 short tons of slate and had products valued at \$7,128,485. The extent to which dimension-stone dressing activities were included in the statistics for earlier years cannot be determined.

<sup>2</sup> For 1939 and 1909, companies that submitted more than one report are counted only once in the totals.

<sup>3</sup> Not available.

<sup>4</sup> Excludes statistics for items for which information was not available as indicated by footnotes.

<sup>5</sup> On schedules for the 1902 census, concerns were instructed that "The average number employed during the year is the number that would be required, at continuous employment for the twelve months, to produce the quantity of products reported." "In editing the schedules ... the figures for the average number of employees were reduced to a 300-day basis whenever the schedules showed them to be the average number for a shorter period; when it was evident that the employees had worked more than 300 days, the average number for the longer period was allowed to stand."

<sup>6</sup> The 1889 census schedules called for "average number employed," presumably an average for active periods; and requested that figures for wage earners "include those employed by contractors and subcontractors."

<sup>7</sup> Represents cost of explosives.

<sup>8</sup> For 1919 and 1909, statistics include amounts paid for purchased power other than electric. Statistics for cost of purchased power for 1902 and 1889 were not explicitly requested, but probably are included in part in the figures for supplies and materials.

<sup>9</sup> Represents horsepower of steam boilers.

TABLE 119.—SUMMARY STATISTICS FOR THE SLATE INDUSTRY IN THE UNITED STATES, BY STATE: 1939, 1929, AND 1919<sup>1</sup>

STATE AND CENSUS YEAR	Number of quarries and mines	Number of wage earners (average for the year)	Number of salaried employees	Production of slate (tons of 2,000 pounds)	Value of all products	PRINCIPAL EXPENSES DESIGNATED BELOW					Aggregate horsepower rating of power equipment
						Total	Wages	Salaries	Supplies and materials, fuel, and purchased electric energy	Contract work	
UNITED STATES											
1939	79	1,341	115	683,900	\$4,162,547	\$2,747,448	\$1,251,707	\$231,572	\$1,236,192	\$27,977	29,554
1929	130	4,098	274	682,000	10,486,390	26,954,091	4,884,038	2746,824	1,296,655	26,574	35,817
1919	104	3,513	275	409,000	5,720,792	4,683,055	3,128,249	409,255	1,049,918	95,653	20,613
NEW YORK											
1939 <sup>3</sup>	4	11	—	11,658	16,136	10,299	7,876	—	2,423	—	1,820
1929	15	155	10	111,000	729,642	351,342	227,376	28,090	95,876	—	3,120
1919	10	134	6	74,000	445,027	246,246	135,826	10,497	96,440	3,483	2,022
PENNSYLVANIA											
1939 <sup>3</sup>	24	465	39	225,818	1,156,730	750,718	456,351	87,795	186,260	20,312	7,602
1929	33	1,951	120	179,000	4,330,001	3,227,164	2,352,559	321,914	544,829	7,862	15,334
1919	42	1,892	142	134,000	2,651,533 <sup>4</sup>	2,420,635	1,655,082	208,884	504,636	52,033	9,678
VERMONT											
1939 <sup>3</sup>	34	287	24	87,803	532,776	372,363	242,347	36,319	93,697	—	4,579
1929	67	1,303	92	222,000	3,653,786	2,265,954	1,701,192	215,580	330,470	18,712	10,141
1919	39	1,039	94	189,000	2,057,388	1,480,686	976,143	144,203	349,703	10,637	6,447
VIRGINIA											
1939 <sup>3</sup>	3	131	3	41,757	197,368	144,681	95,110	8,416	41,155	—	1,772
1929	7	489	27	53,000	850,882	629,793	360,029	109,160	180,604	—	1,477
1919	5	210	14	7,000	203,068	195,950	152,491	19,509	23,950	—	445
OTHER STATES											
1939 <sup>3</sup>	14	447	49	517,088	2,209,537	1,469,387	450,023	99,042	912,657	7,665	13,781
1929	8	200	17	117,000	923,069	443,618	242,882	35,860	164,876	—	3,745
1919	8	238	19	6,000	363,776	339,538	208,707	26,182	75,189	29,480	2,021

<sup>1</sup>For definition of the industry and for explanation regarding the extent of comparability of statistics for 1939, 1929, and 1919 see table 118, footnote 1.

<sup>2</sup>Includes statistics for 8 salaried employees paid \$36,220 reported for central administrative offices for which statistics by State are not available.

<sup>3</sup>Statistics for crushed and broken slate operations in New York, Pennsylvania, Vermont, and Virginia are included in figures shown for "Other States" to avoid disclosure of confidential information.

TABLE 120.—PRINCIPAL STATISTICS FOR CRUSHED AND BROKEN SLATE OPERATIONS IN THE UNITED STATES: 1939<sup>1</sup>

ITEM	United States	ITEM	United States
Number of operating companies <sup>2</sup>	6	Total number of man-shifts worked by wage earners	101,410
Number of quarries and mines <sup>3</sup>	11	Total number of man-hours worked by wage earners	802,657
Number of preparation plants (crushing, screening, washing, and storage)	11	Average number of hours worked per shift	7.9
Number of persons engaged, total <sup>4</sup>	450	Average hourly earning of wage earners	\$0.53
Wage earners (average for the year)	407	Tons of crushed and broken slate produced per man-hour	0.384
Salaried employees	43	Average number of equivalent full days operations were active	230
Production of crushed and broken slate (tons of 2,000 pounds)	308,269	Fuels consumed: <sup>7</sup>	
Value of all products <sup>5</sup>	\$2,137,272	Anthracite (tons of 2,000 pounds)	106
Principal expenses designated below, total	\$1,420,458	Bituminous coal (tons of 2,000 pounds)	4,457
Wages	\$426,334	Fuel oils (barrels of 42 gallons)	2,721
Salaries	\$92,992	Gasoline and kerosene (gallons)	57,078
Supplies and materials	\$716,392	Electric energy consumed (thousands of kw.-hrs.) <sup>8</sup>	10,219
Fuel	\$39,405	Horsepower rating of power equipment, total	12,594
Purchased electric energy	\$137,670	Per wage earner	
Contract work	\$7,855	Stationary equipment <sup>9</sup>	30.9
Cost of machinery and equipment erected or installed during year <sup>6</sup>	\$24,370	Mobile equipment <sup>10</sup>	11,844
			750

<sup>1</sup>For definition of the industry see table 118, footnote 1. Tables 120 through 128 cover only those operations in the industry that were engaged principally in the production of crushed and broken slate. No rough-dimension slate was reported by such operations.

<sup>2</sup>Of the total, 5 companies were incorporated and 1 unincorporated.

<sup>3</sup>New York and Virginia, 2 quarries each; Arkansas, Maryland, Missouri, Pennsylvania, and Vermont, 1 quarry each; California, 1 underground mine; Georgia, 1 combination underground and open quarry.

<sup>4</sup>No proprietors or firm members were reported.

<sup>5</sup>Represents value at quarries and mines. No secondary products or receipts for services performed for others were reported.

<sup>6</sup>Represents cost of new machinery and equipment only. No expenditures for buildings or for used machinery were reported.

<sup>7</sup>No natural gas was reported.

<sup>8</sup>Purchased only. No electric energy generated by reporting companies was reported.

<sup>9</sup>Aggregate horsepower rating of engines, motors, etc. used for driving stationary or fixed equipment such as hoists, screens, crushers, compressors, etc.

<sup>10</sup>Aggregate horsepower rating of engines, motors, etc. used for driving mobile equipment such as power shovels, locomotives, trucks, tractors, churn drills, etc.

TABLE 121.—NUMBER OF WAGE EARNERS AT CRUSHED AND BROKEN SLATE OPERATIONS IN THE UNITED STATES, BY MONTH: 1939<sup>1</sup>

MONTH	Number	MONTH	Number	MONTH	Number
Average	407	April	435	September	421
January	346	May	414	October	449
February	361	June	428	November	431
March	383	July	376	December	424
		August	423		

<sup>1</sup>For definition of the industry see tables 118 and 120, footnote 1.

TABLE 122.—EMPLOYMENT AND WORKING TIME AT CRUSHED AND BROKEN SLATE OPERATIONS IN THE UNITED STATES, BY DEPARTMENT: 1939<sup>1</sup>

DEPARTMENT	United States	DEPARTMENT	United States
Average number of wage earners on active days, total	425	Number of man-shifts worked by wage earners, total <sup>2</sup>	101,410
		On active days, total	97,551
At quarries and mines, total	159	At quarries and mines, total	37,006
Underground	8	Underground	1,134
Open-cut	128	Open-cut	29,251
Surface shops and yards	23	Surface shops and yards	6,621
At preparation plants (crushing, screening, washing, and storage)	266	At preparation plants (crushing, screening, washing, and storage)	60,956
		On inactive days	3,448
Average number of equivalent full days operations were active	230	Number of man-hours worked by wage earners, total	802,657
		On active days, total	778,521
At quarries and mines, total	233	At quarries and mines, total	293,875
Underground	142	Underground	8,514
Open-cut	229	Open-cut	232,195
Surface shops and yards	288	Surface shops and yards	52,986
At preparation plants (crushing, screening, washing, and storage)	229	At preparation plants (crushing, screening, washing, and storage)	484,846
		On inactive days	24,136

<sup>1</sup> For definition of the industry see footnote 1, tables 118 and 120.  
<sup>2</sup> The total includes 2,475 man-shifts reported worked during a second shift.

TABLE 123.—NUMBER AND HORSEPOWER RATING OF PRIME MOVERS AND ELECTRIC MOTORS AT CRUSHED AND BROKEN SLATE OPERATIONS IN THE UNITED STATES: 1939<sup>1</sup>

TYPE OF EQUIPMENT	PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY <sup>2</sup>				
	Aggregate horsepower	Prime movers (not driving generators)		Electric motors driven by purchased energy	
		Number	Horsepower	Number	Horsepower
United States, total	12,594	25	720	380	11,874
Stationary	11,844	3	250	373	11,594
Mobile	750	22	470	7	280

<sup>1</sup> For definition of the industry see footnote 1, tables 118 and 120. Power-loading machines reported in use or available for use represented 14 power shovels, 1 hoist, and 2 cableways.  
<sup>2</sup> No prime movers driving generators or electric motors driven by energy generated by reporting companies were reported.

TABLE 124.—SELECTED STATISTICS FOR CRUSHED AND BROKEN SLATE OPERATIONS IN THE UNITED STATES, CLASSIFIED BY VALUE OF PRODUCTS: 1939<sup>1</sup>

VALUE OF PRODUCTS	Number of quarries and mines	Number of preparation plants	Production of crushed and broken slate (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED			Wages	Salaries
					Total <sup>2</sup>	Wage earners (average for the year)	Salaried employees		
United States, total	11	11	308,268	\$2,137,272	450	407	43	\$426,334	\$92,992
\$1 - \$19,999	3	3	3,899	28,751	24	21	3	9,607	7,180
\$20,000 - \$49,999	2	2	33,130	222,232	79	76	3	63,008	6,815
\$50,000 - \$99,999	2	2							
\$100,000 - \$249,999	1	1	271,239	1,886,289	347	310	37	353,719	78,997
\$250,000 - \$499,999	1	1							
\$500,000 - \$999,999	2	2							

<sup>1</sup> For definition of the industry see tables 118 and 120, footnote 1. Reports classified by value of products represent a single quarry or mine and a single preparation plant reported together.  
<sup>2</sup> No proprietors or firm members were reported.

TABLE 125.—SELECTED STATISTICS FOR CRUSHED AND BROKEN SLATE OPERATIONS IN THE UNITED STATES, CLASSIFIED BY QUANTITY OF STONE PRODUCED: 1939<sup>1</sup>

TONS (2,000 POUNDS) OF CRUSHED AND BROKEN SLATE	Number of quarries and mines	Number of preparation plants	Production of slate (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED			Wages	Salaries
					Total <sup>2</sup>	Wage earners (average for the year)	Salaried employees		
United States, total	11	11	308,268	\$2,137,272	450	407	43	\$426,334	\$92,992
1 - 999	1	1	37,029	250,983	102	96	6	72,615	13,995
1,000 - 4,999	4	4							
10,000 - 14,999	2	2	271,239	1,886,289	348	511	37	353,719	78,997
25,000 - 49,999	2	2							
50,000 - 99,999	1	1							
100,000 - 199,999	1	1							

<sup>1</sup> For definition of the industry see tables 118 and 120, footnote 1. Reports classified by quantity of slate produced represent a single quarry or mine and a single preparation plant reported together.  
<sup>2</sup> No proprietors or firm members were reported.

TABLE 119.—SUMMARY STATISTICS FOR THE SLATE INDUSTRY IN THE UNITED STATES, BY STATE: 1939, 1929, AND 1919<sup>1</sup>

STATE AND CENSUS YEAR	Number of quarries and mines	Number of wage earners (average for the year)	Number of salaried employees	Production of slate (tons of 2,000 pounds)	Value of all products	PRINCIPAL EXPENSES DESIGNATED BELOW					Aggregate horsepower rating of power equipment
						Total	Wages	Salaries	Supplies and materials, fuel, and purchased electric energy	Contract work	
UNITED STATES											
1939	79	1,341	115	683,900	\$4,162,547	\$2,747,448	\$1,251,707	\$231,572	\$1,236,192	\$27,977	29,564
1929	130	4,098	274	682,000	10,486,390	26,954,091	4,884,038	2746,824	1,296,655	26,574	33,817
1919	104	3,513	275	409,000	5,720,792	4,683,055	3,128,249	409,255	1,049,918	95,633	20,613
NEW YORK											
1939 <sup>3</sup>	4	11	—	11,658	16,156	10,299	7,876	—	2,423	—	1,820
1929	15	155	10	111,000	728,642	351,342	227,376	28,090	95,876	—	3,120
1919	10	134	6	74,000	445,027	246,246	135,826	10,497	96,440	3,483	2,022
PENNSYLVANIA											
1939 <sup>3</sup>	24	465	39	225,818	1,156,730	750,718	456,351	87,795	186,260	20,312	7,602
1929	35	1,951	120	179,000	4,330,001	3,227,164	2,352,559	321,914	544,829	7,862	15,334
1919	42	1,692	142	134,000	2,651,535 <sup>4</sup>	2,420,635	1,655,082	208,884	504,656	52,033	9,878
VERMONT											
1939 <sup>3</sup>	34	297	24	87,603	582,776	372,363	242,347	56,319	93,697	—	4,579
1929	67	1,305	92	222,000	3,653,798	2,265,954	1,701,192	215,580	330,470	18,712	10,141
1919	39	1,039	94	168,000	2,057,388	1,480,686	976,143	144,203	349,703	10,837	6,447
VIRGINIA											
1939 <sup>3</sup>	3	131	3	41,757	197,368	144,681	95,110	8,416	41,155	—	1,772
1929	7	489	27	55,000	850,882	629,793	360,029	109,160	160,604	—	1,477
1919	5	210	14	7,000	203,068	195,950	152,491	19,509	23,950	—	445
OTHER STATES											
1939 <sup>3</sup>	14	447	49	317,068	2,209,537	1,469,387	450,023	99,042	912,657	7,865	13,781
1929	8	200	17	117,000	923,069	443,618	242,882	35,880	164,876	—	3,745
1919	8	238	19	6,000	363,776	339,538	208,707	26,162	75,189	29,480	2,021

<sup>1</sup>For definition of the industry and for explanation regarding the extent of comparability of statistics for 1939, 1929, and 1919 see table 118, footnote 1.

<sup>2</sup>Includes statistics for 8 salaried employees paid \$36,220 reported for central administrative offices for which statistics by State are not available.

<sup>3</sup>Statistics for crushed and broken slate operations in New York, Pennsylvania, Vermont, and Virginia are included in figures shown for "Other States" to avoid disclosure of confidential information.

TABLE 120.—PRINCIPAL STATISTICS FOR CRUSHED AND BROKEN SLATE OPERATIONS IN THE UNITED STATES: 1939<sup>1</sup>

ITEM	United States	ITEM	United States
Number of operating companies <sup>2</sup>	6	Total number of man-shifts worked by wage earners	101,410
Number of quarries and mines <sup>3</sup>	11	Total number of man-hours worked by wage earners	802,657
Number of preparation plants (crushing, screening, washing, and storage)	11	Average number of hours worked per shift	7.9
Number of persons engaged, total <sup>4</sup>	450	Average hourly earning of wage earners	\$0.53
Wage earners (average for the year)	407	Tons of crushed and broken slate produced per man-hour	0.584
Salaried employees	43	Average number of equivalent full days operations were active	230
Production of crushed and broken slate (tons of 2,000 pounds)	308,268	Fuels consumed: <sup>7</sup>	
Value of all products <sup>5</sup>	\$2,137,272	Anthracite (tons of 2,000 pounds)	108
Principal expenses designated below, total	\$1,420,458	Bituminous coal (tons of 2,000 pounds)	4,457
Wages	\$428,354	Fuel oils (barrels of 42 gallons)	2,721
Salaries	\$92,992	Gasoline and kerosene (gallons)	37,078
Supplies and materials	\$716,392	Electric energy consumed (thousands of kw.-hrs.) <sup>8</sup>	10,219
Fuel	\$39,405	Horsepower rating of power equipment, total	12,594
Purchased electric energy	\$137,670	Per wage earner	
Contract work	\$7,665	Stationary equipment <sup>9</sup>	30.9
Cost of machinery and equipment erected or installed during year <sup>6</sup>	\$24,370	Mobile equipment <sup>10</sup>	11,844
			750

<sup>1</sup>For definition of the industry see table 118, footnote 1. Tables 120 through 128 cover only those operations in the industry that were engaged principally in the production of crushed and broken slate. No rough-dimension slate was reported by such operations.

<sup>2</sup>Of the total, 5 companies were incorporated and 1 unincorporated.

<sup>3</sup>New York and Virginia, 2 quarries each; Arkansas, Maryland, Missouri, Pennsylvania, and Vermont, 1 quarry each; California, 1 underground mine; Georgia, 1 combination underground and open quarry.

<sup>4</sup>No proprietors or firm members were reported.

<sup>5</sup>Represents value at quarries and mines. No secondary products or receipts for services performed for others were reported.

<sup>6</sup>Represents cost of new machinery and equipment only. No expenditures for buildings or for used machinery were reported.

<sup>7</sup>No natural gas was reported.

<sup>8</sup>Purchased only. No electric energy generated by reporting companies was reported.

<sup>9</sup>Aggregate horsepower rating of engines, motors, etc. used for driving stationary or fixed equipment such as hoists, screens, crushers, compressors, etc.

<sup>10</sup>Aggregate horsepower rating of engines, motors, etc. used for driving mobile equipment such as power shovels, locomotives, trucks, tractors, churn drills, etc.

TABLE 121.—NUMBER OF WAGE EARNERS AT CRUSHED AND BROKEN SLATE OPERATIONS IN THE UNITED STATES, BY MONTH: 1939<sup>1</sup>

MONTH	Number	MONTH	Number	MONTH	Number
Average	407	April	435	September	421
January	346	May	414	October	448
February	361	June	426	November	431
March	383	July	376	December	424
		August	423		

<sup>1</sup>For definition of the industry see tables 118 and 120, footnote 1.

TABLE 122.—EMPLOYMENT AND WORKING TIME AT CRUSHED AND BROKEN SLATE OPERATIONS IN THE UNITED STATES, BY DEPARTMENT: 1939<sup>1</sup>

DEPARTMENT	United States	DEPARTMENT	United States
Average number of wage earners on active days, total	425	Number of man-shifts worked by wage earners, total <sup>2</sup>	101,410
At quarries and mines, total	159	On active days, total	97,831
Underground	8	At quarries and mines, total	37,008
Open-cut	128	Underground	1,134
Surface shops and yards	23	Open-cut	29,251
At preparation plants (crushing, screening, washing, and storage)	266	Surface shops and yards	6,821
		At preparation plants (crushing, screening, washing, and storage)	60,956
		On inactive days	5,448
Average number of equivalent full days operations were active	230	Number of man-hours worked by wage earners, total	802,857
At quarries and mines, total	233	On active days, total	778,521
Underground	142	At quarries and mines, total	295,875
Open-cut	229	Underground	8,514
Surface shops and yards	288	Open-cut	232,195
At preparation plants (crushing, screening, washing, and storage)	229	Surface shops and yards	52,966
		At preparation plants (crushing, screening, washing, and storage)	484,846
		On inactive days	24,136

<sup>1</sup> For definition of the industry see footnote 1, tables 118 and 120.

<sup>2</sup> The total includes 2,475 man-shifts reported worked during a second shift.

TABLE 123.—NUMBER AND HORSEPOWER RATING OF PRIME MOVERS AND ELECTRIC MOTORS AT CRUSHED AND BROKEN SLATE OPERATIONS IN THE UNITED STATES: 1939<sup>1</sup>

TYPE OF EQUIPMENT	PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY <sup>2</sup>				
	Aggregate horsepower	Prime movers (not driving generators)		Electric motors driven by purchased energy	
		Number	Horsepower	Number	Horsepower
United States, total	12,594	25	720	380	11,874
Stationary	11,844	3	250	373	11,594
Mobile	750	22	470	7	280

<sup>1</sup> For definition of the industry see footnote 1, tables 118 and 120. Power-loading machines reported in use or available for use represented 14 power shovels, 1 hoist, and 2 cableways.

<sup>2</sup> No prime movers driving generators or electric motors driven by energy generated by reporting companies were reported.

TABLE 124.—SELECTED STATISTICS FOR CRUSHED AND BROKEN SLATE OPERATIONS IN THE UNITED STATES, CLASSIFIED BY VALUE OF PRODUCTS: 1939<sup>1</sup>

VALUE OF PRODUCTS	Number of quarries and mines	Number of preparation plants	Production of crushed and broken slate (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED			Wages	Salaries
					Total <sup>2</sup>	Wage earners (average for the year)	Salaried employees		
United States, total	11	11	308,268	\$2,137,272	450	407	43	\$426,334	\$92,992
\$1 - \$19,999	3	3	3,899	28,751	24	21	3	9,607	7,180
\$20,000 - \$49,999	2	2	33,130	222,232	79	76	3	63,008	6,815
\$50,000 - \$99,999	2	2							
\$100,000 - \$249,999	1	1							
\$250,000 - \$499,999	1	1	271,239	1,886,289	347	310	37	353,719	78,997
\$500,000 - \$999,999	1	2							

<sup>1</sup> For definition of the industry see tables 118 and 120, footnote 1. Reports classified by value of products represent a single quarry or mine and a single preparation plant reported together.

<sup>2</sup> No proprietors or firm members were reported.

TABLE 125.—SELECTED STATISTICS FOR CRUSHED AND BROKEN SLATE OPERATIONS IN THE UNITED STATES, CLASSIFIED BY QUANTITY OF STONE PRODUCED: 1939<sup>1</sup>

TONS (2,000 POUNDS) OF CRUSHED AND BROKEN SLATE	Number of quarries and mines	Number of preparation plants	Production of slate (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED			Wages	Salaries
					Total <sup>2</sup>	Wage earners (average for the year)	Salaried employees		
United States, total	11	11	308,268	\$2,137,272	450	407	43	\$426,334	\$92,992
1 - 999	1	1							
1,000 - 4,999	4	4	37,029	250,983	102	96	6	72,615	13,995
10,000 - 14,999	2	2							
25,000 - 49,999	2	2							
50,000 - 99,999	1	1	271,239	1,886,289	348	311	37	353,719	78,997
100,000 - 199,999	1	1							

<sup>1</sup> For definition of the industry see tables 118 and 120, footnote 1. Reports classified by quantity of slate produced represent a single quarry or mine and a single preparation plant reported together.

<sup>2</sup> No proprietors or firm members were reported.

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TABLE 126.—SELECTED STATISTICS FOR CRUSHED AND BROKEN SLATE OPERATIONS IN THE UNITED STATES, CLASSIFIED BY NUMBER OF WAGE EARNERS: 1939<sup>1</sup>

NUMBER OF WAGE EARNERS	Number of quarries and mines	Number of preparation plants	Production of crushed and broken slate (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED			Wages	Salaries
					Total <sup>2</sup>	Wage earners (average for the year)	Salaried employees		
United States, total-----	11	11	308,268	\$2,137,272	450	407	43	\$426,334	\$92,992
1 - 5-----	2	2	11,952	90,388	41	37	4	30,236	9,220
6 - 20-----	3	3							
21 - 50-----	3	3	60,496	334,214	104	99	5	85,444	15,010
51 - 100-----	2	2	235,820	1,712,870	305	271	34	310,654	68,762
101 - 250-----	1	1							

<sup>1</sup> For definition of the industry see tables 118 and 120, footnote 1. Reports classified by average number of wage earners employed during the year represent a single quarry or mine and a single preparation plant reported together.

<sup>2</sup> No proprietors or firm members were reported.

TABLE 127.—SELECTED STATISTICS FOR CRUSHED AND BROKEN SLATE OPERATIONS IN THE UNITED STATES, CLASSIFIED BY NUMBER OF HOURS PER WAGE EARNER IN THE FULL-TIME WORKWEEK: 1939<sup>1</sup>

HOURS PER WEEK	Number of quarries and mines	Number of preparation plants	Production of crushed and broken slate (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED			Wages	Salaries
					Total <sup>2</sup>	Wage earners (average for the year)	Salaried employees		
United States, total-----	11	11	308,268	\$2,137,272	450	407	43	\$426,334	\$92,992
40-----	1	1	172,335	1,386,038	234	212	22	238,026	58,035
41 - 42-----	3	3							
43 - 44-----	3	3	27,024	176,059	73	69	4	48,528	8,475
Unclassified-----	4	4	108,909	575,175	143	126	17	139,780	26,482

<sup>1</sup> For definition of the industry see tables 118 and 120, footnote 1. Reports were classified by number of hours in the full-time workweek reported for wage earners in that department of the operation for which the largest number of man-hours worked was reported. Statistics shown for "Unclassified" represent reports on which number of hours was not reported and reports on which no wage earners were reported.

<sup>2</sup> No proprietors or firm members were reported.

TABLE 128.—SELECTED STATISTICS FOR CRUSHED AND BROKEN SLATE OPERATIONS IN THE UNITED STATES, CLASSIFIED BY NUMBER OF DAYS ACTIVE DURING THE YEAR: 1939<sup>1</sup>

NUMBER OF DAYS ACTIVE DURING YEAR	Number of quarries and mines	Number of preparation plants	Production of crushed and broken slate (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED			Wages	Salaries
					Total <sup>2</sup>	Wage earners (average for the year)	Salaried employees		
United States, total-----	11	11	308,268	\$2,137,272	450	407	43	\$426,334	\$92,992
100 - 149-----	1	1	55,130	314,168	102	95	7	85,678	18,475
150 - 199-----	3	3							
200 - 224-----	1	1	144,229	1,247,929	205	186	19	200,876	48,035
225 - 249-----	1	1							
250 - 274-----	1	1	108,909	575,175	143	126	17	139,780	26,482
275 - 299-----	2	2							
300 - 324-----	1	1							
Unclassified-----	1	1							

<sup>1</sup> For definition of the industry see tables 118 and 120, footnote 1. Reports classified by number of days active represent a single quarry or mine and a single preparation plant reported together and were classified by number of days the quarry or mine was in operation during the year. Statistics shown for "Unclassified" represent reports for more than one quarry or mine or preparation plant and reports on which number of days active was not reported.

<sup>2</sup> No proprietors or firm members were reported.

TABLE 129.—PRINCIPAL STATISTICS FOR ROUGH DIMENSION SLATE OPERATIONS IN THE UNITED STATES, BY STATE: 1939<sup>1</sup>

ITEM	United States	New York	Pennsylvania	Vermont	Virginia	Maine and California <sup>2</sup>
Number of operating companies-----	64	4	24	30	3	3
Number of quarries and mines <sup>3</sup> -----	68	4	24	34	3	3
Number of persons engaged, total-----	1,066	18	518	346	134	50
Wage earners (average for the year)-----	934	11	465	287	131	40
Salaried employees-----	72	---	39	24	3	6
Proprietors and firm members-----	60	7	14	35	---	4
Performing manual labor-----	33	5	4	21	---	3
Production of dimension slate:						
Tons of 2,000 pounds, total-----	375,632	11,656	225,816	87,603	41,757	8,800
From underground mines-----	375,632	11,656	225,816	87,603	41,757	8,800
From open quarries-----	---	---	---	---	---	---
Value at quarries and mines-----	\$2,019,613	\$16,136	\$1,151,068	\$52,776	\$197,368	\$72,265
Value of all products-----	\$2,025,275	\$16,136	\$1,156,730	\$52,776	\$197,368	\$72,265
Principal expenses designated below, total-----	\$1,326,990	\$10,299	\$750,718	\$372,363	\$144,681	\$48,929
Wages-----	\$825,373	\$7,876	\$456,351	\$242,347	\$95,110	\$23,689
Salaries-----	\$138,580	---	\$87,795	\$36,319	\$8,416	\$6,050
Supplies and materials-----	\$164,842	\$275	\$88,343	\$49,117	\$17,520	\$9,587
Fuel-----	\$73,748	\$1,255	\$47,246	\$7,839	\$15,705	\$1,703
Purchased electric energy-----	\$104,135	\$893	\$50,871	\$36,741	\$7,930	\$7,900
Contract work-----	\$20,312	---	\$20,312	---	---	---
Cost of buildings, machinery, and equipment erected or installed during year-----	\$53,342	\$377	\$24,560	\$14,891	\$13,314	\$200
Buildings-----	\$5,240	---	\$1,557	\$2,683	\$1,000	---
Machinery and equipment, total-----	\$48,102	\$377	\$23,003	\$12,208	\$12,314	\$200
Purchased in new condition-----	\$31,583	\$100	\$16,041	\$10,208	\$5,134	\$100
Purchased in used condition-----	\$16,519	\$277	\$6,962	\$2,000	\$7,180	\$100
Total number of man-shifts worked by wage earners-----	222,795	2,819	108,359	73,799	30,900	6,918
Total number of man-hours worked by wage earners-----	1,808,287	22,731	873,754	602,378	254,060	55,344
Average number of hours worked per shift-----	8.1	8.1	8.1	8.2	8.2	8.0
Average hourly earning of wage earners-----	\$0.46	\$0.35	\$0.52	\$0.40	\$0.37	\$0.43
Tons of dimension slate produced per man-hour, all mines-----	0.21	0.51	0.26	0.15	0.16	0.16
At underground mines-----	0.21	0.51	0.26	0.15	0.16	0.16
At open quarries-----	---	---	---	---	---	---
Average number of equivalent full days operations were active, all mines-----	227	175	223	248	221	161
Underground mines-----	227	175	223	248	221	161
Open quarries-----	---	---	---	---	---	---
Horsepower rating of power equipment, total-----	16,960	1,820	7,602	4,579	1,772	1,187
Per wage earner-----	18.2	165.5	16.3	16.0	13.5	29.7
Stationary equipment <sup>4</sup> -----	11,877	23	6,228	3,594	895	1,137
Mobile equipment <sup>5</sup> -----	5,083	1,797	1,374	985	877	50
Electric energy consumed (thousands of kw.-hrs.), total-----	4,487	21	2,124	1,288	546	488
Purchased-----	4,431	21	2,108	1,288	546	488
Generated by reporting companies-----	56	---	16	20	---	---

<sup>1</sup> For definition of the industry see table 118, footnote 1. Tables 129 through 142 cover only those operations in the industry that were engaged principally in the production of rough-dimension slate.

<sup>2</sup> Maine, 2 mines; California, 1.

<sup>3</sup> No preparation plants were reported.

<sup>4</sup> Aggregate horsepower rating of engines, motors, etc. used for driving stationary or fixed equipment such as hoists, screens, compressors, etc.

<sup>5</sup> Aggregate horsepower rating of engines, motors, etc. used for driving mobile equipment such as power shovels, locomotives, trucks, tractors, churn drills, etc.

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TABLE 130.—QUANTITY AND VALUE OF PRODUCTS OF ROUGH-DIMENSION SLATE OPERATIONS IN THE UNITED STATES, BY TYPE OF PRODUCT AND BY STATE: 1939<sup>1</sup>

ITEM	UNITED STATES		NEW YORK		PENNSYLVANIA		VERMONT		VIRGINIA		MAINE AND CALIFORNIA	
	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value
All products, total	(2)	\$2,025,275	11,658	\$16,136	(2)	\$1,156,730	87,603	\$582,776	41,757	\$197,368	8,900	\$72,265
All slate produced <sup>3</sup>	375,832	2,019,613	11,658	16,136	225,816	1,151,068	87,603	582,776	41,757	197,368	8,900	72,265
Rough-dimension slate, total	2,698	8,951					270	3,300	113	452	2,315	5,199
For use in construction:												
Irregular shaped slate for buildings, foundations, etc.	270	3,300					270	3,300				
Rubble (foundations, retaining walls, and similar low-priced slate)	113	452							113	452		
Other uses	2,315	5,199									2,315	5,199
Dressed-dimension slate, including sawed, cut, or split slate, total	172,918	3,415,770	3,775	32,471	97,888	2,066,857	46,652	814,140	20,822	362,712	1,781	117,590
For use in construction or architecture (walls, roofing, foundations, etc.)	145,028	2,588,826	707	13,745	83,654	1,473,004	59,584	706,205	20,422	380,712	679	15,162
For monuments and mausoleums	585	12,517			447	9,417	2	534			134	2,586
Flagging and floors or walkway slabs	6,891	45,032	2,978	14,492	907	5,137	2,606	23,403	400	2,000		
Hill stock (blocks, slabs, or pieces)	19,918	755,330	90	4,236	12,400	547,234	6,480	83,998			968	99,862
Other uses	500	34,065			500	34,065						
Rough blocks used to produce dressed-dimension slate	372,934	2,010,662	11,656	16,136	225,816	1,151,068	87,333	579,476	41,644	196,918	6,485	67,066
Receipts for services performed for others	(2)	5,662			(2)	5,662						

<sup>1</sup> For definition of the industry see tables 118 and 129, footnote 1.<sup>2</sup> Not significant.<sup>3</sup> Represents the sum of "Rough-dimension slate" and "Rough blocks used to produce dressed-dimension slate."TABLE 131.—NUMBER OF WAGE EARNERS AT ROUGH-DIMENSION SLATE OPERATIONS IN THE UNITED STATES, BY TYPE OF OPERATION, BY STATE, AND BY MONTH: 1939<sup>1</sup>

TYPE OF OPERATION AND STATE	Average for the 12 months	NUMBER RECEIVING PAY DURING PAY-ROLL PERIOD ENDING NEAREST THE 15TH OF THE MONTH											
		January	February	March	April	May	June	July	August	September	October	November	December
United States	934	877	790	860	912	957	970	997	1,018	956	969	959	940
TYPE OF OPERATION													
Open quarries	881	823	740	811	863	908	917	947	965	902	912	899	881
Underground mines	53	54	50	49	49	49	53	50	53	54	57	60	59
STATE													
New York	11	14	16	16	14	15	15	11	8	5	7	8	8
Pennsylvania	465	418	373	433	458	475	478	493	506	503	498	484	461
Vermont	287	271	232	244	273	300	307	325	333	278	291	291	295
Virginia	131	131	131	131	131	131	131	131	131	131	131	131	131
Maine and California	40	42	38	36	36	36	39	37	40	39	42	45	45

<sup>1</sup> For definition of the industry see tables 118 and 129, footnote 1.

TABLE 132.—EMPLOYMENT AND WORKING TIME AT ROUGH-DIMENSION SLATE OPERATIONS IN THE UNITED STATES, BY DEPARTMENT AND BY STATE: 1939<sup>1</sup>

DEPARTMENT	United States	New York	Pennsylvania	Vermont	Virginia	Maine and California
Average number of wage earners on active days, total	970	16	482	298	131	43
At quarries and mines, total	970	16	482	298	131	43
Underground	55		12			43
Open-cut	912	16	468	297	131	
Surface shops and yards	3		2	1		
Average number of equivalent full days operations were active	227	175	223	248	221	161
At quarries and mines, total	227	175	223	248	221	161
Underground	182		258			161
Open-cut	250	175	223	248	221	
Surface shops and yards	193		219	155		
Number of man-shifts worked by wage earners, total <sup>2</sup>	222,795	2,819	108,359	73,799	30,900	6,918
On active days, total	220,068	2,793	107,668	73,799	28,890	6,918
At quarries and mines, total	220,068	2,793	107,668	73,799	28,890	6,918
Underground	9,990		5,072			6,918
Open-cut	209,483	2,765	104,158	73,644	28,890	
Surface shops and yards	593		438	155		
On inactive days	2,729	26	693		2,010	
Number of man-hours worked by wage earners, total	1,808,267	22,731	873,754	602,378	254,060	55,344
On active days, total	1,783,701	22,528	867,483	602,378	235,970	55,344
At quarries and mines, total	1,783,701	22,528	867,483	602,378	235,970	55,344
Underground	79,920		24,578			55,344
Open-cut	1,699,037	22,528	839,405	601,188	235,970	
Surface shops and yards	4,744		3,504	1,240		
On inactive days	24,566	203	6,271		18,090	

<sup>1</sup> For definition of the industry see tables 118 and 129, footnote 1.<sup>2</sup> The total includes 268 man-shifts in Pennsylvania reported worked during a second shift.TABLE 133.—QUANTITY OF FUEL AND ELECTRIC ENERGY CONSUMED AT ROUGH-DIMENSION SLATE OPERATIONS IN THE UNITED STATES, BY TYPE OF OPERATION AND BY STATE: 1939<sup>1</sup>

TYPE OF OPERATION AND STATE	FUEL <sup>2</sup>				ELECTRIC ENERGY (thousands of kilowatt-hours)		
	Anthracite (tons of 2,000 pounds)	Bituminous coal (tons of 2,000 pounds)	Fuel oils (barrels of 42 gallons)	Gasoline and kerosene (gallons)	Total	Purchased	Generated by reporting companies
United States, total	93	10,051	504	122,739	4,487	4,431	36
TYPE OF OPERATION							
Open quarries	64	10,051	504	114,439	3,910	3,874	36
Underground mines	29			8,300	557	557	
STATE							
New York		5		8,510	21	21	
Pennsylvania	75	8,969	426	65,512	2,124	2,108	16
Vermont	18	565	78	17,308	1,288	1,268	20
Virginia		2,512		23,109	546	546	
Maine and California				8,300	488	488	

<sup>1</sup> For definition of the industry see tables 118 and 129, footnote 1.<sup>2</sup> No natural gas was reported consumed.

## MINERAL INDUSTRIES

TABLE 134.—NUMBER AND HORSEPOWER RATING OF PRIME MOVERS AND ELECTRIC MOTORS AT ROUGH-DIMENSION SLATE OPERATIONS IN THE UNITED STATES, BY TYPE OF OPERATION AND BY STATE: 1939<sup>1</sup>

TYPE OF OPERATION AND STATE	Aggregate horsepower	PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY										ELECTRIC MOTORS DRIVEN BY ENERGY GENERATED BY REFRIGERATING COMPANIES	
		Prime movers								Electric motors driven by purchased energy			
		Total		Driving generators		Not driving generators		Ordinarily idle (included in preceding columns)					
Number	Horsepower	Number	Horsepower	Number	Horsepower	Number	Horsepower	Number	Horsepower	Number	Horsepower		
United States, total	16,960	121	6,225	2	237	119	5,988	6	256	462	10,735	21	250
Stationary	11,877	51	3,387	2	237	49	3,150	2	150	391	8,490	21	250
Mobile	5,083	70	2,838			70	2,838	4	106	71	2,245		
TYPE OF OPERATION													
Open quarries, total	15,632	116	5,975	2	237	114	5,738	6	256	423	9,657	21	250
Stationary	10,599	47	3,187	2	237	45	2,950	2	150	352	7,412	21	250
Mobile	5,033	69	2,788			69	2,788	4	106	71	2,245		
Underground mines, total	1,328	5	250			5	250			39	1,078		
Stationary	1,276	4	200			4	200			39	1,078		
Mobile	50	1	50			1	50						
STATE													
New York, total	1,820	3	222			3	222			38	1,598		
Stationary	23									3	23		
Mobile	1,797	3	222			3	222			35	1,575		
Pennsylvania, total	7,802	59	3,331	1	37	58	3,294	2	150	187	4,271	4	50
Stationary	6,228	30	2,334	1	37	29	2,297	2	150	187	3,894	4	50
Mobile	1,374	29	997			29	997			20	377		
Vermont, total	4,579	16	1,010	1	200	15	810			200	3,569	17	200
Stationary	3,594	5	318	1	200	4	118			184	3,276	17	200
Mobile	985	11	692			11	692			16	293		
Virginia, total	1,772	38	1,412			38	1,412	4	106	9	360		
Stationary	895	12	535			12	535			9	360		
Mobile	877	26	877			26	877	4	106				
Maine and California, total	1,187	5	250			5	250			28	937		
Stationary	1,137	4	200			4	200			28	937		
Mobile	50	1	50			1	50						

<sup>1</sup> For definition of the industry see tables 118 and 129, footnote 1.

TABLE 135.—NUMBER OF POWER-LOADING MACHINES AT ROUGH-DIMENSION SLATE OPERATIONS IN THE UNITED STATES, BY TYPE, BY KIND OF POWER USED, BY SIZE, AND BY STATE: 1939<sup>1</sup>

TYPE, KIND OF POWER USED, AND SIZE	United States	New York	Pennsylvania	Vermont	Virginia	Maine and California
Power shovels, total <sup>2</sup>	18	2	3	6	7	
Kind of power used:						
Steam	10		3		7	
Electric	1	1				
Internal-combustion engine	7			6		
Dragline excavators, total <sup>3</sup>	3	1	2			
Bucket capacity (cubic yards):						
Less than 3	1	1				
3 to 5	2		2			
Cranes and hoists, total	19		3	8	8	
Kind of power used:						
Steam	11		3		8	
Electric	8			8		
Other types, total <sup>4</sup>	24	1	7	15		1
Kind of power used:						
Steam	7		7			
Electric	17	1		15		1

<sup>1</sup> For definition of the industry see footnote 1, tables 118 and 129.

<sup>2</sup> All had dipper capacities of less than 3 cubic yards.

<sup>3</sup> Driven by electric power.

<sup>4</sup> Includes 3 bucket-type loaders and 20 cableways and 1 underground scraper loader (including slusher) with horsepower rating of hoist, 28 to 100.

TABLE 136.—SELECTED STATISTICS FOR INCORPORATED AND FOR UNINCORPORATED OPERATING COMPANIES ENGAGED IN ROUGH-DIMENSION SLATE OPERATIONS IN THE UNITED STATES, BY STATE: 1939<sup>1</sup>

STATE AND TYPE OF OWNERSHIP	Number of operating companies	Number of quarries and mines	Production of rough-dimension slate (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED				Wages	Salaries
					Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members		
United States, total	64	68	375,632	\$2,025,275	1,066	934	72	60	\$825,373	\$138,580
Incorporated	26	29	295,069	1,508,450	699	638	61	60	583,514	120,131
Unincorporated	38	39	82,563	516,825	367	296	11	60	241,859	18,449
New York, total	4	4	11,656	16,136	18	11	7	5	7,876	-----
Incorporated	1	1	11,656	16,136	18	11	7	5	7,876	-----
Unincorporated	3	3								
Pennsylvania, total	24	24	225,916	1,156,730	519	465	39	14	456,351	87,795
Incorporated	17	17	219,185	1,080,571	451	412	39	14	414,870	87,795
Unincorporated	7	7	6,831	76,159	67	53	-----	14	41,481	-----
Vermont, total	30	34	87,803	582,776	346	287	24	35	242,347	36,319
Incorporated	4	7	25,444	163,401	75	62	13	-----	53,247	17,870
Unincorporated	26	27	62,159	419,375	271	225	11	35	189,100	18,449
Virginia, total <sup>2</sup>	3	3	41,757	197,368	134	131	3	-----	95,110	8,416
Maine and California, total	3	3	8,800	72,265	50	40	6	4	23,689	6,050
Incorporated	1	1	8,800	72,265	50	40	6	4	23,689	6,050
Unincorporated	2	2								

<sup>1</sup> For definition of the industry see tables 118 and 129, footnote 1.  
<sup>2</sup> All companies were incorporated.

TABLE 137.—SELECTED STATISTICS FOR ROUGH-DIMENSION SLATE OPERATIONS IN THE UNITED STATES, CLASSIFIED BY VALUE OF PRODUCTS AND BY STATE: 1939<sup>1</sup>

STATE AND VALUE OF PRODUCTS	Number of quarries and mines	Production of rough-dimension slate (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED					Wages	Salaries
				Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members			
							Total	Performing manual labor		
United States, total	68	375,632	\$2,025,275	1,066	934	72	60	33	\$825,373	\$138,580
\$1 - \$19,999	38	45,484	321,260	249	188	7	54	33	151,389	7,465
\$20,000 - \$49,999	9	51,799	294,317	187	167	18	2	-----	136,631	25,417
\$50,000 - \$99,999	11	136,469	753,666	439	416	22	1	-----	354,928	44,648
\$100,000 - \$249,999	4	120,455	483,628	126	107	19	-----	-----	123,678	46,688
Unclassified	6	21,425	167,404	65	56	6	3	-----	58,748	14,562
New York, total	4	11,656	16,136	18	11	7	5	-----	7,876	-----
\$1 - \$19,999	4	11,656	16,136	18	11	7	5	-----	7,876	-----
Pennsylvania, total	24	225,916	1,156,730	519	465	39	14	4	456,351	87,795
\$1 - \$19,999	11	105,361	673,102	392	358	20	14	4	332,073	41,107
\$20,000 - \$49,999	2									
\$50,000 - \$99,999	7	120,455	483,628	126	107	19	-----	-----	123,678	46,688
\$100,000 - \$249,999	4									
Unclassified	4	21,425	167,404	65	56	6	3	-----	58,748	14,562
Vermont, total	34	87,803	582,776	346	287	24	35	21	242,347	36,319
\$1 - \$19,999	21	22,459	173,154	119	87	2	30	21	71,635	1,210
\$20,000 - \$49,999	6	43,719	242,218	162	144	16	2	-----	111,964	20,747
\$50,000 - \$99,999	1									
Unclassified	6	21,425	167,404	65	56	6	3	-----	58,748	14,562
Other States, total	6	50,557	269,833	184	171	9	4	3	118,799	14,466
\$1 - \$19,999	2	10,238	55,805	38	35	1	4	3	25,099	1,595
\$20,000 - \$49,999	1									
\$50,000 - \$99,999	3	40,319	213,828	146	138	8	-----	-----	95,700	12,871

<sup>1</sup> For definition of the industry see tables 118 and 129, footnote 1. Reports classified by value of products represent a single quarry or mine. Statistics shown for "Unclassified" represent reports for more than one quarry or mine.

## MINERAL INDUSTRIES

TABLE 138.—SELECTED STATISTICS FOR ROUGH-DIMENSION SLATE OPERATIONS IN THE UNITED STATES, CLASSIFIED BY QUANTITY OF STONE PRODUCED AND BY STATE: 1939<sup>1</sup>

STATE AND TONS (2,000 POUNDS) OF ROUGH-DIMENSION SLATE	Number of quarries and mines	Production of rough-dimension slate (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED					Wages	Salaries
				Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members			
							Total	Performing manual labor		
United States, total	68	375,332	\$2,025,275	1,066	934	72	60	33	\$925,373	\$132,580
1 - 249	4	817	15,086	19	12	-----	7	6	6,017	-----
250 - 499	10	3,810	77,094	66	53	4	9	5	39,704	5,055
500 - 999	12	8,500	113,827	84	64	2	18	13	53,920	1,380
1,000 - 1,999	8	7,221	86,321	65	54	1	10	4	48,535	42
2,000 - 2,999	8	14,355	69,059	62	46	9	7	2	27,171	7,120
3,000 - 4,999	5	18,888	344,318	164	155	8	1	-----	153,980	17,775
5,000 - 9,999	9	55,999	363,119	167	147	17	3	3	130,980	31,005
10,000 - 24,999	7	114,577	504,190	261	252	7	2	-----	208,404	19,901
25,000 - 49,999	2	120,000	285,017	113	95	18	-----	-----	100,934	41,940
50,000 and over	1	-----	-----	-----	-----	-----	-----	-----	-----	-----
Unclassified	6	21,425	187,404	65	56	6	3	-----	58,748	14,362
Pennsylvania, total	24	225,816	1,156,730	518	465	39	14	4	456,351	87,795
1 - 249	1	-----	-----	-----	-----	-----	-----	-----	-----	-----
250 - 499	4	1,821	45,090	45	35	4	6	2	23,149	5,051
500 - 999	4	-----	-----	-----	-----	-----	-----	-----	-----	-----
1,000 - 1,999	2	20,392	409,750	221	205	8	8	2	196,629	17,945
2,000 - 2,999	4	-----	-----	-----	-----	-----	-----	-----	-----	-----
3,000 - 4,999	3	25,771	153,199	60	55	5	-----	-----	59,365	12,100
5,000 - 9,999	3	57,832	263,674	79	75	4	-----	-----	76,274	10,755
10,000 - 24,999	2	120,000	285,017	113	95	18	-----	-----	100,934	41,940
25,000 - 49,999	1	-----	-----	-----	-----	-----	-----	-----	-----	-----
50,000 and over	1	-----	-----	-----	-----	-----	-----	-----	-----	-----
Unclassified	6	21,425	187,404	65	56	6	3	-----	58,748	14,362
Vermont, total	34	87,603	582,776	346	287	24	35	21	242,347	36,319
1 - 249	1	-----	-----	-----	-----	-----	-----	-----	-----	-----
250 - 499	5	2,005	35,064	27	21	-----	6	6	17,097	-----
500 - 999	8	-----	-----	-----	-----	-----	-----	-----	-----	-----
1,000 - 1,999	4	11,117	118,758	84	61	2	21	15	52,301	222
2,000 - 2,999	4	-----	-----	-----	-----	-----	-----	-----	-----	-----
3,000 - 4,999	1	-----	-----	-----	-----	-----	-----	-----	-----	-----
5,000 - 9,999	3	53,056	261,552	170	149	16	5	-----	114,201	21,735
10,000 - 24,999	2	-----	-----	-----	-----	-----	-----	-----	-----	-----
25,000 - 49,999	2	-----	-----	-----	-----	-----	-----	-----	-----	-----
50,000 and over	1	-----	-----	-----	-----	-----	-----	-----	-----	-----
Unclassified	6	21,425	187,404	65	56	6	3	-----	58,748	14,362
Other States, total	10	62,213	285,769	202	182	9	11	8	126,875	14,466
1 - 249	2	-----	-----	-----	-----	-----	-----	-----	-----	-----
250 - 499	1	5,634	22,261	24	16	-----	8	5	9,973	-----
500 - 999	2	-----	-----	-----	-----	-----	-----	-----	-----	-----
1,000 - 1,999	3	-----	-----	-----	-----	-----	-----	-----	-----	-----
2,000 - 2,999	3	-----	-----	-----	-----	-----	-----	-----	-----	-----
3,000 - 4,999	2	56,579	263,508	178	166	9	3	3	116,702	14,466

<sup>1</sup> For definition of the industry see tables 118 and 129, footnote 1. Reports classified by quantity of slate produced represent a single quarry or mine. Statistics shown for "Unclassified" represent reports for more than one quarry or mine.

TABLE 139.—SELECTED STATISTICS FOR ROUGH-DIMENSION SLATE OPERATIONS IN THE UNITED STATES, CLASSIFIED BY NUMBER OF WAGE EARNERS AND BY STATE: 1939<sup>1</sup>

STATE AND NUMBER OF WAGE EARNERS	Number of quarries and mines	Production of rough-dimension slate (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED					Wages	Salaries
				Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members			
							Total	Performing manual labor		
United States, total	68	375,332	\$2,025,275	1,066	934	72	60	33	\$925,373	\$132,580
None	1	-----	-----	3	-----	-----	3	3	-----	-----
1 - 5	26	51,290	178,494	137	93	1	43	25	70,722	1,032
6 - 20	17	53,327	368,656	210	186	15	9	5	163,401	25,035
21 - 50	14	241,394	1,056,333	466	418	46	2	-----	373,591	86,965
51 - 100	3	27,764	248,113	181	177	4	-----	-----	153,949	11,186
Unclassified	7	21,857	173,689	69	60	6	3	-----	63,650	14,362
Pennsylvania, total	24	225,816	1,156,730	518	465	39	14	4	456,351	87,795
1 - 5	5	2,063	29,472	34	22	1	11	3	17,451	1,032
6 - 20	9	27,506	206,244	118	108	7	3	1	94,362	12,523
21 - 50	8	-----	-----	-----	-----	-----	-----	-----	-----	-----
51 - 100	2	196,247	921,014	366	335	31	-----	-----	344,538	74,240
Vermont, total	34	87,603	582,776	346	287	24	35	21	242,347	36,319
None	1	-----	-----	3	-----	-----	3	3	-----	-----
1 - 5	18	17,561	128,367	82	58	-----	24	16	44,980	-----
6 - 20	7	-----	-----	-----	-----	-----	-----	-----	-----	-----
21 - 50	3	48,185	280,720	192	169	18	5	2	133,717	21,957
Unclassified	7	21,857	173,689	69	60	6	3	-----	63,650	14,362
Other States, total	10	62,213	285,769	202	182	9	11	8	126,875	14,466
1 - 5	5	11,866	20,645	21	13	-----	8	6	8,351	-----
6 - 20	1	-----	-----	-----	-----	-----	-----	-----	-----	-----
21 - 50	3	50,547	265,124	181	169	9	3	2	118,324	14,466
51 - 100	1	-----	-----	-----	-----	-----	-----	-----	-----	-----

<sup>1</sup> For definition of the industry see tables 118 and 129, footnote 1. Reports classified by average number of wage earners employed during the year represent a single quarry or mine. Statistics shown for "Unclassified" represent reports for more than one quarry or mine and reports on which number of wage earners, by month, was not adequately reported.

TABLE 140.—SELECTED STATISTICS FOR ROUGH-DIMENSION SLATE OPERATIONS IN THE UNITED STATES, CLASSIFIED BY NUMBER OF HOURS PER WAGE EARNER IN THE FULL-TIME WORKWEEK AND BY STATE: 1939<sup>1</sup>

STATE AND HOURS PER WEEK	Number of quarries and mines	Production of rough-dimension slate (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED					Wages	Salaries
				Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members			
							Total	Performing manual labor		
United States, total-----	68	375,632	\$2,025,275	1,066	934	72	60	33	\$825,373	\$138,580
40-----	18	84,579	491,832	315	274	32	9	3	210,260	47,112
41 - 42-----	27	190,381	922,696	568	313	32	23	11	313,465	69,182
43 - 44-----	13	69,084	444,628	255	232	6	17	13	217,642	17,765
Unclassified-----	10	31,588	166,119	128	115	2	11	6	84,006	4,541
Pennsylvania, total-----	24	225,816	1,156,730	518	465	39	14	4	456,351	87,795
40-----	8	182,989	819,409	328	291	34	3	1	281,166	73,905
41 - 42-----	9									
43 - 44-----	6	42,827	337,321	190	174	5	11	3	175,185	13,890
Unclassified-----	1									
Vermont, total-----	34	87,603	522,776	346	287	24	35	21	242,347	36,319
40-----	8	28,284	188,164	127	107	14	6	3	80,157	20,445
41 - 42-----	17	54,740	335,908	178	149	10	19	8	137,869	15,874
43 - 44-----	3	4,599	58,703	41	31	-----	10	10	24,321	-----
Unclassified-----	6									
Other States, total-----	10	62,213	285,769	202	182	9	11	8	126,675	14,466
40-----	2	8,987	71,046	50	40	6	4	2	24,533	6,050
41 - 42-----	1									
43 - 44-----	4	24,094	86,756	61	54	1	6	6	41,236	3,875
Unclassified-----	3	29,152	127,967	91	88	2	1	-----	60,906	4,541

<sup>1</sup> For definition of the industry see tables 118 and 129, footnote 1. Reports were classified by number of hours in the full-time workweek reported for wage earners in that department of the operation for which the largest number of man-hours worked was reported. Statistics shown for "Unclassified" represent reports on which number of hours was not reported and reports on which no wage earners were reported.

TABLE 141.—SELECTED STATISTICS FOR ROUGH DIMENSION SLATE OPERATIONS IN THE UNITED STATES, CLASSIFIED BY NUMBER OF DAYS ACTIVE DURING THE YEAR: 1939<sup>1</sup>

NUMBER OF DAYS ACTIVE DURING YEAR	Number of quarries and mines	Production of rough-dimension slate (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED					Wages	Salaries
				Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members			
							Total	Performing manual labor		
United States, total-----	68	375,632	\$2,025,275	1,066	934	72	60	33	\$825,373	\$138,580
50 - 99-----	1	8,316	74,900	48	37	6	5	3	23,118	6,050
100 - 149-----	3									
150 - 199-----	7	6,582	68,607	71	49	10	12	3	29,885	8,152
200 - 224-----	13	121,203	649,920	300	273	18	9	8	248,579	32,883
225 - 249-----	14	69,512	334,894	196	183	7	6	1	149,514	16,273
250 - 274-----	19	128,806	622,621	309	273	23	13	10	264,589	56,805
275 - 299-----	3	4,888	32,329	31	18	1	12	8	15,140	190
300 - 324-----	1									
Unclassified-----	7	36,345	242,004	111	101	7	5	-----	94,748	18,237

<sup>1</sup> For definition of the industry see tables 118 and 129, footnote 1. Reports classified by number of days active represent a single quarry or mine and were classified by number of days the quarry or mine was in operation for production or development purposes during the year. Statistics shown for "Unclassified" represent reports for more than one quarry or mine and reports on which number of days active was not reported.

## MINERAL INDUSTRIES

TABLE 142.—SELECTED STATISTICS FOR ROUGH-DIMENSION SLATE OPERATIONS IN THE UNITED STATES, CLASSIFIED BY OUTPUT PER MAN-HOUR AND BY STATE: 1939<sup>1</sup>

STATE AND TONS OF SLATE PER MAN-HOUR (tons of 2,000 pounds)	Number of quarries and mines	Production of rough- dimension slate (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS EMPLOYED					Wages	Salaries
				Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members			
							Total	Performing manual labor		
United States, total-----	68	375,632	\$2,025,275	1,066	934	72	60	33	\$825,373	\$138,550
Less than 0.050-----	17	17,221	343,410	273	250	10	13	7	221,374	14,717
0.050 - 0.099-----	7	6,637	118,704	69	57	5	7	1	52,687	12,412
0.100 - 0.149-----	8	53,004	445,809	219	197	17	5	-----	171,377	32,075
0.150 - 0.199-----	4	27,699	121,423	86	82	2	2	-----	58,628	3,976
0.200 - 0.299-----	5	27,416	124,793	52	45	4	3	1	45,893	9,532
0.300 - 0.399-----	3	31,549	124,446	49	46	2	1	-----	44,983	5,940
0.400 - 0.599-----	4	63,042	245,889	79	72	7	-----	-----	55,953	11,663
0.600 - 0.799-----	2	97,315	240,199	81	66	14	1	-----	84,025	35,310
1.000 - 1.499-----	1									
Unclassified-----	17	51,749	260,612	158	119	11	25	24	90,952	12,945
Pennsylvania, total-----	24	225,816	1,156,780	518	465	39	14	4	456,351	87,755
Less than 0.050-----	11	13,933	283,773	217	202	8	7	2	181,138	14,495
0.050 - 0.099-----	1									
0.100 - 0.149-----	2	13,870	226,065	72	63	6	3	-----	65,761	13,705
0.150 - 0.199-----	1									
0.200 - 0.299-----	2	45,836	191,901	73	68	5	-----	-----	73,848	13,212
0.300 - 0.399-----	1									
0.400 - 0.599-----	3	152,177	454,991	156	132	20	4	2	135,604	46,713
0.600 - 0.799-----	1									
1.000 - 1.499-----	1	1	1	1	1	1	1	1	1	1
Unclassified-----	1	1	1	1	1	1	1	1	1	1
Vermont, total-----	34	87,603	582,776	346	287	24	35	21	242,347	36,319
Less than 0.050-----	5	8,851	162,508	108	94	7	7	3	85,745	12,634
0.050 - 0.099-----	1									
0.100 - 0.149-----	4	29,244	136,111	100	91	4	5	-----	79,374	11,155
0.150 - 0.199-----	1									
0.200 - 0.299-----	2	9,133	47,462	25	20	1	4	1	16,296	1,010
0.300 - 0.399-----	2									
0.400 - 0.599-----	1	15,119	65,096	23	20	2	1	-----	14,210	2,460
0.600 - 0.799-----	1									
Unclassified-----	13	25,256	171,604	90	62	10	18	17	46,722	9,070
Other States, total-----	10	62,213	285,769	202	182	9	11	8	126,675	14,465
Less than 0.050-----	1	14,372	116,616	77	66	7	4	3	44,134	7,645
0.050 - 0.099-----	1									
0.100 - 0.149-----	2	47,841	169,153	125	116	2	7	5	82,541	6,821
0.150 - 0.199-----	1									
0.200 - 0.299-----	1	1	1	1	1	1	1	1	1	1
0.600 - 0.799-----	1	1	1	1	1	1	1	1	1	1
Unclassified-----	3	1	1	1	1	1	1	1	1	1

<sup>1</sup> For definition of the industry see tables 118 and 129, footnote 1. Reports classified by output per man-hour represent a single quarry or mine. Statistics shown for "Unclassified" represent reports for more than one quarry or mine and reports on which man-hours were not adequately reported.

## Marble

Commercial marble quarries and mines<sup>1</sup> in the United States had an output in 1939 valued at \$2,709,000 at points of production. These operations produced 316,000 short tons of marble, of which 240,000 tons consisted of rough blocks and slabs and 76,000 tons of crushed and broken stone.

The marble industry includes the production of marble, serpentine (verde antique), dolomitic marble, and "onyx." Marble is a metamorphic rock resulting from the recrystallization of limestone, and consists of calcite, dolomite, or a mixture of both. Commercially, calcareous and serpentine rocks capable of being polished are classed as marble. The rough blocks and slabs are used chiefly in the manufacture of monumental stone, building stone, interior decorations, statuary, and novelties. The crushed and broken product is used for terrazzo, stucco, riprap, lime, fluxing stone, and in many chemical industries.

### PRINCIPAL EXPENSES

The industry employed an average of 1,405 wage earners in 1939, and paid a total of \$1,100,000 in wages. Salaried employees, who numbered 41 in October, were paid \$105,000 for the year. Expenditures for supplies and materials totaled \$139,000; for fuel, \$87,000; and for purchased electric energy, \$101,000. In addition, \$11,000 was paid for work done on contract. The sum of these reported expenses is \$1,543,000. The cost of new buildings erected and machinery and equipment installed during the year was \$31,000.

### PRODUCTION

The 316,000 short tons of marble produced in 1939 was about 42 percent less than the 1929 production and about 4 percent below that of 1919. The value of all products of the industry was about 64 percent less than in 1929 and about 38 percent less than in 1919. Marble was produced in 1939 at 44 mines and quarries located in 15 States. Operations engaged principally in producing rough-dimension blocks and slabs were located in 12 of these States; operations producing crushed and broken marble were situated in 6 States. Operations in Tennessee accounted for 37 percent of the total tonnage of rough-dimension stone reported for 1939, followed by Vermont with 30 percent of the total. The bulk of the Vermont production was obtained from underground mines, but the largest part of the remaining output of dimension-stone operations, as well as the tonnage reported by crushed-stone operations, came from open quarries.

### EMPLOYMENT AND WORKING TIME

The average of 1,405 wage earners employed in the industry in 1939 was 58 percent less than the 3,350 reported for 1929 and 19 percent less than the 1919 average of 1,732. A total of 2,973,000 man-hours were worked by wage earners in 1939--2,846,000 at dimension-stone operations and 127,000 at crushed-stone operations. The length of shift worked by wage earners averaged 8.2 hours at dimension-stone operations and 8.0 hours at crushed-stone quarries. Tennessee accounted for 54 percent of the total number of man-hours worked at dimension-stone operations and reported the longest average shift, 8.4 hours.

<sup>1</sup>The statistics presented in this report cover marble quarries and mines whose production enters into the usual channels of commerce. Thus, the figures exclude quarries and mines operated by governmental agencies, public utilities, and construction companies or contractors producing stone wholly for their own use or on contract for a government agency.

Dimension-stone operations employed an average of 1,335 wage earners, of whom 711 were reported in Tennessee and 282 in Vermont. Crushed-stone operations employed an average of 70 wage earners during the year. Monthly employment at both types of marble operations ranged from 1,283 wage earners in February to the year's peak of 1,522 in July. Employment generally declined during the winter months and recovered during the summer and fall.

Quarries and mines producing rough-dimension blocks and slabs were active the equivalent of 234 full days during the year, those in Tennessee averaging 246 days and those in Vermont 198 days. Crushed-stone quarries were active an average of 220 days. Of the 44 quarries and mines, 2 operated on a three-shift basis; the remaining 42 worked only a single shift.

Output per man-hour at dimension-stone operations was 0.09 ton at open quarries and 0.15 ton at underground mines; the average for all marble operations was 0.10 ton. The figures for quarries in Tennessee and Vermont were 0.07 ton and 0.06 ton, respectively; underground mines in Vermont averaged 0.15 ton. Crushed-stone operations had an output per man-hour of 0.27 ton.

The hourly earning per wage earner averaged 34 cents at crushed-stone quarries and 37 cents at dimension-stone operations. Wage payments per man-hour at the last-named operations varied from 47 cents in Vermont and 44 cents in Missouri to 33 cents in Tennessee.

### POWER EQUIPMENT

Power equipment in use or available for use at marble operations at the end of 1939 had an aggregate rated capacity of 13,000 horsepower. Almost 77 percent of the total available horsepower reported for 1939 represented that used for driving stationary equipment such as hoists, screens, crushers, and compressors; the remainder was used for driving mobile equipment such as power shovels, locomotives, trucks, tractors, and churn drills. The aggregate horsepower rating of equipment at dimension-stone operations was 15,160, half of which was reported by operations in Tennessee and four-fifths of which was for driving stationary equipment. Of the 2,087 horsepower at crushed-stone operations, half was used for driving stationary equipment. Average available horsepower per wage earner at crushed-stone operations was 30; at dimension-stone operations, 12.

The marble industry consumed 9,337,000 kilowatt-hours of electric energy in 1939, of which 7,914,000 were purchased. Dimension-stone operations accounted for 94 percent of the electric energy used; Tennessee operations reported the largest consumption and purchased all the electric energy which they used. The total of 561,000 kilowatt-hours used at crushed-stone operations consisted entirely of purchased energy.

Power-loading machines at marble operations at the end of 1939 totaled 95 units of all types, including 84 cranes and hoists and 5 power shovels. Each of the power shovels had a dipper capacity of less than 3 cubic yards. Forty-seven of the cranes and hoists were steam-driven and 27 were powered by electric or Diesel-electric motors.

The statistics summarized in this report cover operations engaged primarily in the production of rough-dimension marble and crushed and broken marble. They do not cover operations engaged in cutting, shaping, polishing, and otherwise finishing the rough blocks and slabs; statistics for such operations are included in reports for the stone-manufacturing industries.

## MINERAL INDUSTRIES

TABLE 143.—PRINCIPAL STATISTICS FOR THE MARBLE INDUSTRY IN THE UNITED STATES: 1939, 1929, 1919, 1909, 1902, AND 1889<sup>1</sup>

(For producing operations only)

ITEM	1939	1929	1919	1909	1902	1889
Number of operating companies <sup>2</sup>	31	( <sup>3</sup> )	( <sup>3</sup> )	77	75	74
Number of quarries and mines	44	88	82	108	85	103
Production of marble (tons of 2,000 pounds)	316,155	549,000	331,000	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Value of all products, total	\$2,708,857	\$7,538,905	\$4,397,912	\$6,239,120	<sup>4</sup> \$5,044,182	<sup>4</sup> \$3,466,170
Marble produced	\$2,708,857	\$7,523,550	\$4,385,853	( <sup>3</sup> )	\$5,044,182	\$3,466,170
Other products and services rendered		\$15,355	\$12,059	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Number of persons engaged, total	1,452	3,603	1,891	6,502	<sup>4</sup> 4,422	<sup>4</sup> 4,529
Wage earners (average for the year, including inactive periods)	1,405	3,350	1,732	6,166	<sup>5</sup> 4,070	<sup>6</sup> 4,275
Salariied employees	41	246	152	287	352	254
Proprietors and firm members	6	7	7	49	( <sup>3</sup> )	( <sup>3</sup> )
Performing manual labor	2	( <sup>3</sup> )	3	6	( <sup>3</sup> )	( <sup>3</sup> )
Principal expenses designated below, total	\$1,542,617	\$5,021,150	\$2,503,965	\$4,295,490	\$3,379,483	<sup>4</sup> \$2,464,797
Wages	\$1,100,352	\$3,291,541	\$1,452,440	\$3,079,023	\$2,212,840	\$1,809,211
Salaries	\$105,114	\$613,133	\$254,119	\$383,107	\$341,021	
Supplies and materials	\$138,590	\$553,619	\$552,439	\$544,327		<sup>7</sup> \$655,586
Fuel	\$86,947	\$156,839	\$147,644		<sup>7</sup> \$825,822	
Purchased electric energy	\$100,617	\$387,793	\$76,741	<sup>7</sup> \$261,689		( <sup>3</sup> )
Contract work	\$10,697	\$16,225	<sup>7</sup> \$20,562	\$27,344		( <sup>3</sup> )
Cost of machinery and equipment erected or installed during year	\$30,438	\$192,776	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Horsepower rating of power equipment, total	18,247	30,198	15,628	21,779	14,266	<sup>8</sup> 11,392
Per wage earner	13.0	9.0	9.0	3.5	3.5	2.7
Prime movers	7,758	6,013	6,021	20,844	14,266	( <sup>3</sup> )
Electric motors driven by purchased energy	10,509	24,185	9,607	855		( <sup>3</sup> )
Horsepower rating of electric motors driven by energy generated by reporting companies	6,043	172	480	8,035		( <sup>3</sup> )
Fuels consumed:						
Anthracite (tons of 2,000 pounds)	502	318	235	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Bituminous coal (tons of 2,000 pounds)	24,250	49,765	31,158	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Fuel oils (barrels of 42 gallons)	2,308	659		( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Gasoline and kerosene (gallons)	60,372	40,298	7,140	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Natural gas (thousands of cubic feet)				( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Electric energy consumed (thousands of kw.-hrs.), total	9,337	21,727	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Purchased	7,914	21,727	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Generated by reporting companies	1,423	( <sup>9</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )

<sup>1</sup> Statistics represent the production of marble (including serpentine [verde antique], dolomitic marble, and a small quantity of "onyx"), except that quarried by Federal, State, and local governments, public utilities, and operators who produce stone exclusively for their own use in building or highway construction work, or on contract for a governmental agency. Statistics for 1939 include only those operations (quarries, mines, crushing, screening, or washing plants, or quarries or mines and plants operated together) whose total value of products; designated principal expenses; or cost of buildings, machinery, and equipment erected or installed during the year was at least \$2,500. Figures for 1929 exclude statistics for enterprises "whose output was valued at less than \$2,500; or, if not productive, in which development work costing less than \$2,500 was done." For 1919, "enterprises producing less than \$500 worth of products or ... operations confined to development work on which expenditures amounted to less than \$5,000 during the ... year were ... omitted." No minimum was placed on the size of operations in 1909, 1902, and 1889. Statistics for the marble industry in 1880 are included with figures for the limestone industry. Statistics cover quarrying, stone crushing, and rough-dimension stone-trimming operations. In 1929 and earlier years, figures include some dimension-stone dressing at operations for which quarry data could not be segregated. In 1929 the operators who included dimension-stone dressing activities in their reports produced 35,171 short tons of marble and had products valued at \$1,203,159.

<sup>2</sup> For 1939 and 1909, companies that submitted more than one report are counted only once in the totals.

<sup>3</sup> Not available.

<sup>4</sup> Excludes statistics for items for which information was not available as indicated by footnotes.

<sup>5</sup> On schedules for the 1902 census, concerns were instructed that "The average number employed during the year is the number that would be required, at continuous employment for the twelve months, to produce the quantity of products reported." "In editing the schedules ... the figures for the average number of employees were reduced to a 300-day basis whenever the schedules showed them to be the average number for a shorter period; when it was evident that the employees had worked more than 300 days, the average number for the longer period was allowed to stand."

<sup>6</sup> The 1889 census schedules called for "average number employed," presumably an average for active periods; and requested that figures for wage earners "include those employed by contractors and subcontractors."

<sup>7</sup> For 1919 and 1909, statistics include amounts paid for purchased power other than electric. Statistics for cost of purchased power for 1902 and 1889 were not explicitly requested, but probably are included in part in the figures for supplies and materials.

<sup>8</sup> Represents horsepower of steam boilers.

<sup>9</sup> Less than 1,000 kilowatt-hours.

TABLE 144.—SUMMARY STATISTICS FOR THE MARBLE INDUSTRY IN THE UNITED STATES, BY STATE: 1939, 1929, AND 1919<sup>1</sup>

(For producing operations only)

STATE AND CENSUS YEAR	Number of quarries and mines	Number of wage earners (average for the year)	Number of salaried employees	Production of marble (tons of 2000 pounds)	Value of all products	PRINCIPAL EXPENSES DESIGNATED BELOW					Aggregate horsepower rating of power equipment
						Total	Wages	Salaries	Supplies and materials, fuel and purchased electric energy	Contract work	
United States:											
1939	44	1,405	41	316,155	\$2,708,857	\$1,542,617	\$1,100,352	\$105,114	\$326,454	\$10,897	18,247
1929	88	3,350	246	549,000	7,539,905	2,021,150	3,251,541	613,133	1,098,251	18,225	30,198
1919	62	1,732	152	331,000	4,397,612	2,503,985	1,452,440	254,119	776,824	20,582	15,628
Tennessee:											
1939	12	711	10	103,201	1,059,517	725,899	506,977	37,060	171,945	9,897	8,081
1929	14	1,377	57	105,000	2,287,938	1,520,808	1,093,582	124,414	302,610		6,730
1919	17	540	50	46,000	1,086,131	855,010	407,912	89,397	337,701		3,885
Vermont:											
1939	10	282	2	83,873	681,845	320,158	282,382	2,860	34,916		1,719
1929	23	658	26	102,000	1,829,315	1,146,104	785,579	65,829	284,896		10,077
1919	25	570	40	100,000	2,106,872	853,922	553,075	69,967	230,880		7,354
Other States:											
1939	22	412	29	129,091	987,495	496,760	310,993	65,174	119,593	1,000	8,447
1929	51	1,515	154	342,000	3,421,652	2,321,550	1,412,380	390,200	500,745	18,225	13,391
1919	20	622	62	185,000	1,200,909	615,033	491,455	94,755	208,243	20,582	4,389

<sup>1</sup> For definition of the industry and explanation regarding the extent of comparability of statistics for 1939, 1929, and 1919, see table 143, footnote 1.  
<sup>2</sup> Includes statistics for 9 salaried employees paid \$32,890 reported for central-administrative offices for which statistics by State are not available.  
<sup>3</sup> Figures for 1 crushed and broken marble operation in Tennessee are included with those for "Other States."

TABLE 145.—PRINCIPAL STATISTICS FOR THE CRUSHED AND BROKEN MARBLE INDUSTRY IN THE UNITED STATES: 1939<sup>1</sup>

ITEM	United States	ITEM	United States
Number of operating companies	6	Cost of machinery and equipment erected or installed during year <sup>6</sup>	\$2,450
Number of quarries <sup>2</sup>	6	Purchased in new condition	\$700
Number of preparation plants (crushing, screening, washing, and storage)	5	Purchased in used condition	\$1,750
Number of persons engaged, total	80	Total number of man-shifts worked by wage earners	15,865
Wage earners (average for the year)	70	Total number of man-hours worked by wage earners	126,931
Salaried employees	9	Average number of hours worked per shift	8.0
Proprietors and firm members <sup>3</sup>	1	Average hourly earning of wage earners	\$0.34
Production of marble (tons of 2,000 pounds)	34,815	Tons of crushed and broken marble produced per man-hour	0.27
Value of all products <sup>4</sup>	\$176,672	Average number of equivalent full days operations were active	220
Principal expenses designated below, total <sup>5</sup>	\$98,801	Horsepower rating of power equipment, total	2,087
Wages	\$43,522	Per wage earner	29.8
Salaries	\$29,720	Stationary equipment	1,083
Supplies and materials	\$11,095	Mobile equipment	1,004
Fuel	\$6,032	Fuels consumed: <sup>7</sup>	
Purchased electric energy	\$6,432	Anthracite (tons of 2,000 pounds)	40
		Bituminous coal (tons of 2,000 pounds)	1,210
		Fuel oils (barrels of 42 gallons)	879
		Gasoline and kerosene (gallons)	16,720
		Electric energy consumed (thousands of kw.-hrs.) <sup>8</sup>	561

<sup>1</sup> For definition of the marble industry see table 143, footnote 1. Tables 145 through 149 cover only those operations in the industry that were engaged principally in the production of crushed and broken marble.

<sup>2</sup> All operations were open quarries and all quarries but one were operated in conjunction with a preparation plant; the quarries were located in Alabama, California, Maryland, Tennessee, Texas, and Virginia.

<sup>3</sup> No proprietors or firm members performing manual labor were reported.

<sup>4</sup> Represents value at mines. No secondary products or work performed for others were reported.

<sup>5</sup> No expenditures for contract work were reported.

<sup>6</sup> No expenditures for buildings were reported.

<sup>7</sup> No natural gas was reported consumed.

<sup>8</sup> Purchased only. No energy generated by reporting companies was reported.

TABLE 146.—QUANTITY AND VALUE OF PRODUCTS OF CRUSHED AND BROKEN MARBLE OPERATIONS IN THE UNITED STATES, BY TYPE OF PRODUCT: 1939<sup>1</sup>

ITEM	UNITED STATES		ITEM	UNITED STATES	
	Tons of 2,000 pounds	Value		Tons of 2,000 pounds	Value
All products, total <sup>2</sup>	34,815	\$176,672	Dressed-dimension marble, including sawed, cut, or split stone <sup>3</sup>	120	\$12,000
Rough-dimension marble, total	811	22,785	Rough blocks used to produce dressed-dimension marble	200	4,000
For use in construction:			Crushed, broken, and ground marble, total	33,804	149,887
Irregular-shaped stone for buildings, foundations, sea walls, bridges, etc.	176	4,552	Riprap	15,508	16,886
For architecture (buildings, retaining walls, and similar low-priced stone)	211	12,660	Agricultural	110	110
For monuments and mausoleums	424	5,573	Other uses	20,186	132,891

<sup>1</sup> For definition of the industry see tables 143 and 145, footnote 1.

<sup>2</sup> Represents the sum of "Rough-dimension marble," "Rough blocks used to produce dressed-dimension marble," and "Crushed, broken, and ground marble."

<sup>3</sup> For use in construction or architecture (walls, roofing, etc.).

## MINERAL INDUSTRIES

TABLE 147.—NUMBER OF WAGE EARNERS AT CRUSHED AND BROKEN MARBLE OPERATIONS IN THE UNITED STATES, BY MONTH: 1939<sup>1</sup>

MONTH	Number	MONTH	Number	MONTH	Number
Average-----	70	April-----	69	September-----	72
January-----	72	May-----	68	October-----	74
February-----	71	June-----	67	November-----	74
March-----	68	July-----	71	December-----	74
		August-----	70		

<sup>1</sup> For definition of the industry see tables 143 and 145, footnote 1.

TABLE 148.—EMPLOYMENT AND WORKING TIME AT CRUSHED AND BROKEN MARBLE OPERATIONS IN THE UNITED STATES: 1939<sup>1</sup>

DEPARTMENT	United States	DEPARTMENT	United States
Average number of wage earners on active days, total-----	69	Number of man-shifts worked by wage earners, total <sup>2</sup> -----	11,565
At quarries, total-----	59	On active days, total-----	11,161
Open-cut-----	57	At quarries, total-----	10,639
Surface shops and yards-----	2	Open-cut-----	10,237
At preparation plants-----	10	Surface shops and yards-----	192
		At preparation plants-----	1,575
		On inactive days-----	705
Average number of equivalent full days operations were active-----	220	Number of man-hours worked by wage earners, total-----	126,921
At quarries, total-----	229	On active days, total-----	121,521
Open-cut-----	233	At quarries, total-----	107,914
Surface shops and yards-----	96	Open-cut-----	135,376
At preparation plants-----	168	Surface shops and yards-----	1,436
		At preparation plants-----	13,417
		On inactive days-----	5,660

<sup>1</sup> For definition of the industry see tables 143 and 145, footnote 1.  
<sup>2</sup> All operations were active only one shift per day.

TABLE 149.—NUMBER AND HORSEPOWER RATING OF PRIME MOVERS AND ELECTRIC MOTORS AT CRUSHED AND BROKEN MARBLE OPERATIONS IN THE UNITED STATES: 1939<sup>1</sup>

TYPE OF EQUIPMENT	PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY <sup>2</sup>				
	Aggregate horsepower	Prime movers <sup>3</sup> (not driving generators),		Electric motors driven by purchased energy	
		Number	Horsepower	Number	Horsepower
United States, total-----	2,087	15	1,161	31	926
Stationary-----	1,088	5	157	31	926
Mobile-----	1,004	10	1,004	-----	-----

<sup>1</sup> For definition of the industry see tables 143 and 145, footnote 1. No electric motors driven by energy generated by reporting companies were reported.  
<sup>2</sup> Power-loading machines reported included 3 power shovels, 1 belt conveyor, and 1 bucket elevator.  
<sup>3</sup> Of the total, 1 stationary prime mover with a rating of 20 horsepower was reported ordinarily idle. No prime movers driving generators were reported.

TABLE 150.—PRINCIPAL STATISTICS FOR ROUGH-DIMENSION MARBLE OPERATIONS IN THE UNITED STATES, BY STATE: 1939<sup>1</sup>

ITEM	United States	Arkansas	Missouri	Tennessee	Vermont	Other States <sup>2</sup>
Number of operating companies-----	25	4	3	6	3	9
Number of quarries and mines-----	38	4	3	12	10	9
Number of preparation plants (crushing, screening, washing, and storage) <sup>3</sup> -----	3	-----	1	1	-----	1
Number of persons engaged, total-----	1,372	37	124	721	285	205
Wage earners (average for the year)-----	1,335	34	113	711	282	195
Salaried employees-----	32	-----	11	10	2	9
Proprietors and firm members-----	5	3	-----	-----	1	1
Performing manual labor-----	2	-----	-----	-----	1	1
Production of marble: <sup>4</sup>						
Tons of 2,000 pounds, total-----	281,340	1,818	17,050	103,201	83,873	75,398
From underground mines-----	84,142	-----	-----	-----	80,966	3,176
From open quarries-----	197,198	1,818	17,050	103,201	2,907	72,222
Value of all products <sup>5</sup> -----	\$2,532,185	\$28,942	\$179,102	\$1,059,517	\$661,845	\$602,779
Principal expenses designated below, total-----	\$1,444,016	\$19,315	\$151,419	\$725,899	\$320,158	\$227,225
Wages-----	\$1,056,830	\$15,198	\$109,165	\$506,977	\$282,382	\$143,108
Salaries-----	\$75,394	-----	\$22,821	\$37,080	\$2,960	\$12,833
Supplies and materials-----	\$127,495	\$166	\$10,764	\$60,552	\$20,597	\$35,616
Fuel-----	\$80,915	\$970	\$2,727	\$82,044	\$4,864	\$10,310
Purchased electric energy-----	\$92,465	\$2,981	\$5,142	\$49,549	\$9,455	\$25,358
Contract work-----	\$10,897	-----	\$1,000	\$9,897	-----	-----
Cost of buildings, machinery, and equipment erected or installed during year-----	\$28,764	-----	\$3,461	\$4,361	\$6,885	\$14,057
Buildings-----	\$776	-----	-----	-----	-----	\$776
Machinery and equipment, total-----	\$27,988	-----	\$3,461	\$4,361	\$6,885	\$13,281
Purchased in new condition-----	\$8,164	-----	-----	\$2,321	\$3,385	\$2,458
Purchased in used condition-----	\$19,824	-----	\$3,461	\$2,040	\$3,500	\$10,823
Total number of man-shifts worked by wage earners-----	346,617	5,670	31,116	163,982	74,820	51,029
Total number of man-hours worked by wage earners-----	2,846,328	45,360	248,928	1,545,247	598,557	408,236
Average number of hours worked per shift-----	8.2	8.0	8.0	8.4	8.0	8.0
Average hourly earning of wage earners-----	\$0.37	\$0.34	\$0.44	\$0.33	\$0.47	\$0.35
Tons of marble produced per man-hour, all mines-----	0.10	0.04	0.07	0.07	0.14	0.18
At underground mines-----	0.15	-----	-----	-----	0.15	0.10
At open quarries-----	0.09	0.04	0.07	0.07	0.06	0.19
Average number of equivalent full days operations were active, all mines-----	234	177	271	248	198	237
Underground mines-----	221	-----	-----	-----	219	153
Open quarries-----	237	177	271	248	93	248
Horsepower rating of power equipment, total-----	16,160	455	1,082	8,081	1,719	4,823
Per wage earner-----	12.1	13.4	9.6	11.4	6.1	24.7
Stationary equipment-----	12,990	295	1,000	6,956	958	3,801
Mobile equipment-----	3,170	160	82	1,145	761	1,022
Electric energy consumed (thousands of kw.-hrs.), total-----	8,776	149	426	4,134	1,418	2,649
Purchased-----	7,353	149	376	4,134	465	2,229
Generated by reporting companies-----	1,423	-----	50	-----	953	420

<sup>1</sup>For definition of the marble industry see table 143, footnote 1. Tables 150 through 163 cover only those operations in the industry that were engaged principally in the production of rough-dimension marble.

<sup>2</sup>Colorado, 2 operations; Alabama, Arizona, Georgia, Massachusetts, New Jersey, North Carolina, and Virginia, 1 operation each.

<sup>3</sup>All preparation plants were operated in conjunction with open-cut quarries.

<sup>4</sup>Figures represent rough- rather than dressed-dimension marble; they include 42,152 short tons of crushed and broken marble, valued at \$24,358, produced by quarries and mines engaged principally in the production of rough-dimension marble.

<sup>5</sup>Represents value of marble at quarries or mines. No secondary products or services performed for others were reported.

## MINERAL INDUSTRIES

TABLE 151.—QUANTITY AND VALUE OF PRODUCTS OF ROUGH-DIMENSION MARBLE OPERATIONS IN THE UNITED STATES, BY TYPE OF PRODUCT AND BY STATE: 1939<sup>1</sup>

ITEM	UNITED STATES		ARKANSAS		MISSOURI		TENNESSEE		VERMONT		OTHER STATES	
	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value
All products, total <sup>2</sup> -----	281,340	\$2,532,185	1,818	\$28,942	17,050	\$179,102	103,201	\$1,059,517	83,873	\$661,645	75,398	\$602,779
Rough-dimension marble, total-----	123,969	1,298,101	554	11,542	10,527	120,916	47,093	787,216	28,904	266,518	36,881	111,909
For use in construction:												
Irregular-shaped stone for buildings, foundations, sea walls, bridges, etc.-----	1,453	1,089					1,453	1,089				
Rubble (cellar foundations, retaining walls, and similar low-priced stone)-----	11,361	13,977			4,600	10,413					6,761	3,594
For architecture (buildings and other high-class construction work)-----	77,325	1,133,822	554	11,542	5,147	93,998	45,522	783,771	23,270	214,865	2,872	29,546
For monuments and mausoleums-----	9,544	104,494			780	16,505	118	2,356	5,634	51,853	3,012	33,940
Other uses-----	24,246	44,719									24,246	44,719
Dressed-dimension marble, including sawed, cut, and split stone, total-----	52,016	3,585,120	1,264	17,400	4,450	161,224	8,677	792,742	18,047	962,698	19,576	1,850,856
For use in construction or architecture (walls, roofing, foundations, bridges, etc.)-----	35,410	2,472,364	1,264	17,400	4,400	158,126	8,534	780,267	12,590	696,609	8,622	619,982
For monuments and mausoleums-----	16,578	1,112,465			50	3,098	143	12,475	5,457	266,289	10,928	830,603
Flagging and floors or walkway slabs-----	11	150									11	150
Other uses-----	17	141									17	141
Rough blocks used to produce dressed-dimension marble-----	115,219	1,209,726	1,264	17,400	5,340	53,400	16,819	259,569	54,969	395,327	36,827	484,010
Crushed, broken, and ground marble, total-----	42,152	24,358			1,183	4,786	39,289	12,712			1,680	6,860
Riprap-----	2,958	917					2,958	917				
Concrete and road metal-----	800	800										
Metallurgical (furnace flux)-----	100	86					100	86			100	800
For lime manufacture-----	35,360	5,607					35,360	5,607				
Other uses-----	2,934	16,948			1,183	4,786	871	6,102			880	6,050

<sup>1</sup>For definition of the industry see tables 143 and 150, footnote 1.<sup>2</sup>Represents "Rough-dimension marble," "Rough blocks used to produce dressed-dimension marble," and "Crushed, broken, and ground marble."TABLE 152.—NUMBER OF WAGE EARNERS IN THE ROUGH-DIMENSION MARBLE INDUSTRY IN THE UNITED STATES, BY TYPE OF OPERATION, BY STATE, AND BY MONTH: 1939<sup>1</sup>

TYPE OF OPERATION AND STATE	Average for the 12 months	NUMBER RECEIVING PAY DURING PAY-ROLL PERIOD ENDING NEAREST THE 15TH OF THE MONTH											
		January	February	March	April	May	June	July	August	September	October	November	December
United States, total-----	1,535	1,257	1,212	1,237	1,306	1,394	1,440	1,451	1,435	1,362	1,340	1,311	1,269
TYPE OF OPERATION													
Underground mines-----	274	174	183	184	201	264	302	313	311	314	336	351	346
Open-pit quarries-----	1,061	1,083	1,029	1,053	1,105	1,130	1,138	1,138	1,124	1,048	1,004	980	921
STATE													
Arkansas-----	34	25	15	30	42	45	46	26	40	40	36	24	31
Missouri-----	113	109	108	101	107	113	122	123	125	118	114	114	93
Tennessee-----	711	754	717	723	750	748	758	778	753	682	682	623	597
Vermont-----	282	199	207	205	225	279	309	317	311	306	328	342	351
Alabama, Georgia, North Carolina, and Virginia-----	153	145	142	150	155	152	152	156	156	158	153	156	156
Arizona, Colorado, Massachusetts, and New Jersey-----	42	25	23	28	27	57	51	51	50	51	53	52	41

<sup>1</sup>For definition of industry see tables 143 and 150, footnote 1.

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TABLE 153.—EMPLOYMENT AND WORKING TIME AT ROUGH-DIMENSION MARBLE OPERATIONS IN THE UNITED STATES, BY DEPARTMENT AND BY STATE: 1939<sup>1</sup>

DEPARTMENT	United States	Arkansas	Missouri	Tennessee	Vermont	Other States
Average number of wage earners on active days, total-----	1,482	32	115	743	377	215
At quarries and mines, total-----	1,465	32	111	735	377	210
Underground-----	316				291	25
Open-cut-----	1,102	32	106	724	55	165
Surface shops and yards-----	47		5	11	31	
At preparation plants (crushing, screening, washing, and storage)-----	17		4	8		5
Average number of equivalent full days operations were active-----	234	177	271	248	198	237
At quarries and mines, total-----	234	177	272	249	198	237
Underground-----	213				218	153
Open-cut-----	241	177	270	249	97	248
Surface shops and yards-----	216		300	241	195	
At preparation plants (crushing, screening, washing, and storage)-----	208		245	162		260
Number of man-shifts worked by wage earners, total <sup>2</sup> -----	346,617	5,670	31,116	183,982	74,820	51,029
On active days, total-----	346,522	5,670	31,116	183,930	74,777	51,029
At quarries and mines, total-----	343,026	5,670	30,138	182,714	74,777	49,729
Underground-----	67,257				63,430	3,827
Open-cut-----	285,621	5,670	28,838	180,059	5,354	45,902
Surface shops and yards-----	10,148		1,500	2,655	5,993	
At preparation plants (crushing, screening, washing, and storage)-----	3,496		980	1,216		1,300
On inactive days-----	95			52	43	
Number of man-hours worked by wage earners, total-----	2,846,328	45,360	248,928	1,545,247	598,557	408,236
On active days, total-----	2,845,880	45,360	248,928	1,545,143	598,213	408,236
At quarries and mines, total-----	2,816,696	45,360	241,088	1,534,199	598,213	397,836
Underground-----	538,061				507,441	30,620
Open-cut-----	2,196,444	45,360	229,088	1,511,948	42,832	367,216
Surface shops and yards-----	82,191		12,000	22,251	47,940	
At preparation plants (crushing, screening, washing, and storage)-----	29,134		7,840	10,944		10,400
On inactive days-----	448			104	344	

<sup>1</sup> For definition of the industry see tables 143 and 150, footnote 1.

<sup>2</sup> The total includes 24,798 man-shifts worked during a second shift, and 12,936 man-shifts during a third shift.

TABLE 154.—QUANTITY OF FUEL AND ELECTRIC ENERGY CONSUMED AT ROUGH-DIMENSION MARBLE OPERATIONS IN THE UNITED STATES, BY TYPE OF OPERATION AND BY STATE: 1939<sup>1</sup>

TYPE OF OPERATION AND STATE	FUEL <sup>2</sup>				ELECTRIC ENERGY (thousands of kilowatt-hours)		
	Anthracite (tons of 2,000 pounds)	Bituminous coal (tons of 2,000 pounds)	Fuel oils (barrels of 42 gallons)	Gasoline and kerosene (gallons)	Total	Purchased	Generated by reporting companies
United States, total-----	262	23,040	1,429	43,652	8,776	7,353	1,423
TYPE OF OPERATION							
Underground mines-----	251	54	564		1,580	216	1,364
Open quarries-----	11	22,986	865	43,652	7,196	7,137	59
STATE							
Arkansas-----			75	4,579	149	149	
Missouri-----		600	571		426	378	50
Tennessee-----		20,891		30,838	4,134	4,134	
Vermont-----	262	50	723		1,418	465	953
Other States-----		1,499	60	8,235	2,649	2,229	420

<sup>1</sup> For definition of the industry see tables 143 and 150, footnote 1.

<sup>2</sup> No natural gas was reported consumed.

## MINERAL INDUSTRIES

TABLE 151.—QUANTITY AND VALUE OF PRODUCTS OF ROUGH-DIMENSION MARBLE OPERATIONS IN THE UNITED STATES, BY TYPE OF PRODUCT AND BY STATE: 1939<sup>1</sup>

ITEM	UNITED STATES		ARKANSAS		MISSOURI		TENNESSEE		VERMONT		OTHER STATES	
	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value
All products, total <sup>2</sup> -----	281,340	\$2,532,185	1,818	\$28,942	17,050	\$179,102	103,201	\$1,059,517	83,873	\$861,845	75,396	\$602,779
Rough-dimension marble, total-----	123,969	1,298,101	584	11,542	10,527	120,916	47,093	787,218	28,904	266,518	36,891	111,909
For use in construction:												
Irregular-shaped stone for buildings, foundations, sea walls, bridges, etc.-----	1,453	1,069					1,453	1,069				
Rubble (cellar foundations, retaining walls, and similar low-priced stone)-----	11,361	13,977			4,600	10,413					6,761	3,574
For architecture (buildings and other high-class construction work)-----	77,368	1,133,822	554	11,542	5,147	93,998	45,522	783,771	23,270	214,865	2,872	29,616
For monuments and mausoleums-----	9,544	104,494			780	16,505	118	2,358	5,634	51,653	3,012	33,960
Other uses-----	24,246	44,719									24,246	44,719
Dressed-dimension marble, including sawed, cut, and split stone, total-----	52,016	3,585,120	1,264	17,400	4,450	161,224	8,677	792,742	18,047	962,898	19,578	1,650,855
For use in construction or architecture (walls, roofing, foundations, bridges, etc.)-----	35,410	2,472,364	1,264	17,400	4,400	158,126	8,534	780,267	12,590	696,609	8,622	819,922
For monuments and mausoleums-----	16,578	1,112,465			50	3,098	143	12,475	5,457	266,289	10,928	870,603
Flagging and floors or walkway slabs-----	11	150									11	150
Other uses-----	17	141									17	141
Rough blocks used to produce dressed-dimension marble-----	115,219	1,209,726	1,264	17,400	5,340	53,400	16,819	259,589	54,969	395,327	36,827	484,016
Crushed, broken, and ground marble, total-----	42,152	24,358			1,183	4,786	39,289	12,712			1,680	6,666
Riprap-----	2,958	917					2,958	917				
Concrete and road metal-----	800	800									800	800
Metallurgical (furnace flux)-----	100	86					100	86				
For lime manufacture-----	38,360	5,607					38,360	5,607				
Other uses-----	2,934	16,948			1,183	4,786	871	6,102			860	6,050

<sup>1</sup>For definition of the industry see tables 143 and 150, footnote 1.<sup>2</sup>Represents "Rough-dimension marble," "Rough blocks used to produce dressed-dimension marble," and "Crushed, broken, and ground marble."TABLE 152.—NUMBER OF WAGE EARNERS IN THE ROUGH-DIMENSION MARBLE INDUSTRY IN THE UNITED STATES, BY TYPE OF OPERATION, BY STATE, AND BY MONTH: 1939<sup>1</sup>

TYPE OF OPERATION AND STATE	Average for the 12 months	NUMBER RECEIVING PAY DURING PAY-ROLL PERIOD ENDING NEAREST THE 15TH OF THE MONTH											
		January	February	March	April	May	June	July	August	September	October	November	December
United States, total-----	1,335	1,257	1,212	1,237	1,306	1,394	1,440	1,451	1,435	1,362	1,340	1,311	1,269
TYPE OF OPERATION													
Underground mines-----	274	174	183	184	201	264	302	313	311	314	336	351	346
Open-pit quarries-----	1,061	1,083	1,029	1,053	1,105	1,130	1,138	1,138	1,124	1,048	1,004	960	921
STATE													
Arkansas-----	34	25	15	30	42	45	46	26	40	40	36	24	31
Missouri-----	113	109	108	101	107	113	122	123	125	118	118	114	93
Tennessee-----	711	754	717	723	750	748	758	778	753	682	682	623	597
Vermont-----	282	199	207	205	225	279	309	317	311	306	328	342	351
Alabama, Georgia, North Carolina, and Virginia-----	153	145	142	150	155	152	152	156	156	158	153	156	156
Arizona, Colorado, Massachusetts, and New Jersey-----	42	25	23	28	27	57	51	51	50	51	53	52	41

<sup>1</sup>For definition of industry see tables 143 and 150, footnote 1.

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TABLE 153.—EMPLOYMENT AND WORKING TIME AT ROUGH-DIMENSION MARBLE OPERATIONS IN THE UNITED STATES, BY DEPARTMENT AND BY STATE: 1939<sup>1</sup>

DEPARTMENT	United States	Arkansas	Missouri	Tennessee	Vermont	Other States
Average number of wage earners on active days, total	1,482	32	115	743	377	215
At quarries and mines, total	1,465	32	111	735	377	210
Underground	315				291	25
Open-cut	1,102	32	106	724	55	185
Surface shops and yards	47		5	11	31	
At preparation plants (crushing, screening, washing, and storage)	17		4	8		5
Average number of equivalent full days operations were active	234	177	271	248	198	237
At quarries and mines, total	234	177	272	249	198	237
Underground	213				218	153
Open-cut	241	177	270	249	97	246
Surface shops and yards	216		300	241	193	
At preparation plants (crushing, screening, washing, and storage)	206		245	152		280
Number of man-shifts worked by wage earners, total <sup>2</sup>	346,617	5,670	31,116	183,982	74,820	51,029
On active days, total	346,522	5,670	31,116	183,930	74,777	51,029
At quarries and mines, total	343,026	5,670	30,136	182,714	74,777	49,729
Underground	67,257				63,430	3,827
Open-cut	265,621	5,670	28,636	180,059	5,354	45,902
Surface shops and yards	10,148		1,500	2,655	5,993	
At preparation plants (crushing, screening, washing, and storage)	3,496		980	1,216		1,300
On inactive days	95			52	43	
Number of man-hours worked by wage earners, total	2,846,328	45,360	248,928	1,545,247	598,557	408,236
On active days, total	2,845,880	45,360	248,928	1,545,143	598,213	408,236
At quarries and mines, total	2,816,696	45,360	241,088	1,534,199	598,213	397,856
Underground	538,061				507,441	30,620
Open-cut	2,196,444	45,360	229,088	1,511,948	42,832	367,216
Surface shops and yards	82,191		12,000	22,251	47,940	
At preparation plants (crushing, screening, washing, and storage)	29,184		7,840	10,944		10,400
On inactive days	448			104	344	

<sup>1</sup> For definition of the industry see tables 143 and 150, footnote 1.

<sup>2</sup> The total includes 24,798 man-shifts worked during a second shift, and 12,936 man-shifts during a third shift.

TABLE 154.—QUANTITY OF FUEL AND ELECTRIC ENERGY CONSUMED AT ROUGH-DIMENSION MARBLE OPERATIONS IN THE UNITED STATES, BY TYPE OF OPERATION AND BY STATE: 1939<sup>1</sup>

TYPE OF OPERATION AND STATE	FUEL <sup>2</sup>				ELECTRIC ENERGY (thousands of kilowatt-hours)		
	Anthracite (tons of 2,000 pounds)	Bituminous coal (tons of 2,000 pounds)	Fuel oils (barrels of 42 gallons)	Gasoline and kerosene (gallons)	Total	Purchased	Generated by reporting companies
United States, total	262	23,040	1,429	43,652	8,776	7,353	1,423
TYPE OF OPERATION							
Underground mines	251	54	584		1,580	216	1,364
Open quarries	11	22,986	865	43,652	7,196	7,137	59
STATE							
Arkansas			75	4,579	149	149	
Missouri		600	571		426	376	50
Tennessee		20,891		30,838	4,134	4,134	
Vermont	262	50	723		1,418	465	953
Other States		1,499	60	8,235	2,649	2,229	420

<sup>1</sup> For definition of the industry see tables 143 and 150, footnote 1.

<sup>2</sup> No natural gas was reported consumed.

## MINERAL INDUSTRIES

TABLE 155.—NUMBER AND HORSEPOWER RATING OF PRIME MOVERS AND ELECTRIC MOTORS AT ROUGH-DIMENSION MARBLE OPERATIONS IN THE UNITED STATES, BY TYPE OF OPERATION AND BY STATE: 1939<sup>1</sup>

TYPE OF OPERATION AND STATE	PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY									ELECTRIC MOTORS DRIVEN BY ENERGY GENERATED BY REPORTING COMPANY			
	Aggregate horsepower	Prime movers							Electric motors driven by purchased energy		Number	Horsepower	
		Total		Driving generators		Not driving generators		Ordinarily idle (included in preceding columns)		Number			Horsepower
		Number	Horsepower	Number	Horsepower	Number	Horsepower	Number	Horsepower				
United States, total-----	16,160	87	6,577	3	730	84	5,847	2	80	235	9,583	208	6,142
Stationary-----	12,990	69	4,363	3	730	66	3,633	-----	-----	193	8,627	149	5,417
Mobile-----	3,170	18	2,214	-----	-----	18	2,214	2	80	42	956	59	725
Underground mines, total-----	297	-----	-----	-----	-----	-----	-----	-----	-----	10	297	197	5,438
Stationary-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	138	4,731
Mobile-----	297	-----	-----	-----	-----	-----	-----	-----	-----	10	297	59	607
Open quarries, total-----	15,863	87	6,577	3	730	84	5,847	2	80	225	9,286	11	517
Stationary-----	12,990	69	4,363	3	730	66	3,633	-----	-----	193	8,627	11	517
Mobile-----	2,873	18	2,214	-----	-----	18	2,214	2	80	32	659	-----	-----
STATE													
Arkansas, total-----	455	8	230	-----	-----	8	230	2	80	9	225	-----	-----
Stationary-----	295	4	70	-----	-----	4	70	-----	-----	9	225	-----	-----
Mobile-----	160	4	160	-----	-----	4	160	2	80	-----	-----	-----	-----
Missouri, total-----	1,022	3	800	2	580	1	220	-----	-----	8	282	5	311
Stationary-----	1,000	3	800	2	580	1	220	-----	-----	6	200	5	311
Mobile-----	82	-----	-----	-----	-----	-----	-----	-----	-----	2	82	-----	-----
Tennessee, total-----	8,081	64	4,220	-----	-----	64	4,220	-----	-----	105	3,861	-----	-----
Stationary-----	6,936	57	3,188	-----	-----	57	3,188	-----	-----	97	3,748	-----	-----
Mobile-----	1,145	7	1,032	-----	-----	7	1,032	-----	-----	8	113	-----	-----
Vermont, total-----	1,719	2	205	1	150	1	55	-----	-----	60	1,514	128	4,738
Stationary-----	958	2	205	1	150	1	55	-----	-----	28	753	128	4,738
Mobile-----	761	-----	-----	-----	-----	-----	-----	-----	-----	32	761	59	200
Other States, total-----	4,823	10	1,122	-----	-----	10	1,122	-----	-----	53	3,701	16	517
Stationary-----	3,801	3	100	-----	-----	3	100	-----	-----	53	3,701	16	517
Mobile-----	1,022	7	1,022	-----	-----	7	1,022	-----	-----	-----	-----	-----	-----

<sup>1</sup>For definition of the industry see tables 143 and 150, footnote 1.

TABLE 156.—NUMBER OF POWER-LOADING MACHINES AT ROUGH-DIMENSION MARBLE OPERATIONS IN THE UNITED STATES, BY TYPE, BY KIND OF POWER USED, BY SIZE, AND BY STATE: 1939<sup>1</sup>

TYPE, KIND OF POWER USED, AND SIZE	United States	Arkansas	Missouri	Tennessee	Vermont	Other States
Power shovels <sup>2</sup> -----	2	-----	2	-----	-----	-----
Dragline excavators <sup>3</sup> -----	1	-----	-----	-----	-----	-----
Cranes and hoists, total-----	84	1	4	71	5	-----
Kind of power used:						
Steam-----	47	-----	1	45	-----	-----
Electric-----	27	-----	3	18	-----	-----
Compressed air-----	6	-----	-----	6	5	-----
Internal-combustion engine-----	4	1	-----	2	-----	-----
Other types, total-----	3	-----	-----	2	-----	-----
Kind of power used:						
Electric-----	2	-----	-----	1	-----	-----
Compressed air-----	1	-----	-----	1	-----	-----

<sup>1</sup>For definition of the industry see tables 143 and 150, footnote 1.

<sup>2</sup>Driven by electric power and with dipper capacities of less than 3 cubic yards.

<sup>3</sup>Driven by internal-combustion engine and with bucket capacity of less than 3 cubic yards.

<sup>4</sup>Includes 1 cableway and 2 loading and dumping units.

TABLE 157.—SELECTED STATISTICS FOR INCORPORATED AND UNINCORPORATED OPERATING COMPANIES ENGAGED IN ROUGH-DIMENSION MARBLE OPERATIONS IN THE UNITED STATES, BY STATE: 1939<sup>1</sup>

STATE AND TYPE OF OWNERSHIP	Number of operating companies	Number of quarries and mines	Number of preparation plants	Production of marble (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED				Wages	Salaries
						Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members		
United States, total-----	25	38	3	281,340	\$2,532,185	1,372	1,335	32	5	\$1,056,830	\$75,594
Incorporated-----	22	35	3	279,635	2,510,243	1,360	1,328	32	-----	1,052,179	75,394
Unincorporated-----	3	3	-----	1,705	21,942	12	7	-----	5	4,651	-----
Arkansas, total-----	4	4	-----	1,818	28,942	37	34	-----	3	15,198	-----
Incorporated-----	3	3	-----	1,818	28,942	37	34	-----	3	15,198	-----
Unincorporated-----	1	1	-----								
Missouri <sup>2</sup> -----	3	3	1	17,050	179,102	124	113	11	-----	109,165	22,611
Tennessee <sup>2</sup> -----	6	12	1	103,201	1,059,517	721	711	10	-----	506,977	37,050
Vermont, total-----	3	10	-----	83,873	661,845	285	282	2	1	282,382	2,860
Incorporated-----	2	9	-----	83,873	661,845	285	282	2	1	282,382	2,860
Unincorporated-----	1	1	-----								
Other States, total-----	9	9	1	75,398	602,779	205	195	9	1	143,108	12,833
Incorporated-----	8	8	1	75,398	602,779	205	195	9	1	143,108	12,833
Unincorporated-----	1	1	-----								

<sup>1</sup> For definition of the industry see tables 143 and 150, footnote 1.  
<sup>2</sup> All companies were incorporated.

TABLE 158.—SELECTED STATISTICS FOR ROUGH-DIMENSION MARBLE OPERATIONS IN THE UNITED STATES, CLASSIFIED BY VALUE OF PRODUCTS AND BY STATE: 1939<sup>1</sup>

STATE AND VALUE OF PRODUCTS	Number of quarries and mines	Number of preparation plants	Production of marble (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED					Wages	Salaries	
					Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members				
								Total	Performing manual labor			
United States, total-----	38	3	281,340	\$2,532,185	1,372	1,335	32	5	2	\$1,056,830	\$75,594	
\$1 - \$19,999-----	16	1	12,635	160,532	130	119	6	5	2	75,157	6,598	
\$20,000 - \$49,999-----	9	1	31,573	279,420	231	221	10	-----	-----	156,403	18,598	
\$50,000 - \$99,999-----	5	-----	30,535	369,969	193	190	3	-----	-----	143,593	4,515	
\$100,000 - \$249,999-----	6	1	-----	206,597	1,722,264	818	805	13	-----	-----	681,677	45,682
\$250,000 - \$499,999-----	2	-----	-----									
Arkansas, total-----	4	-----	1,818	28,942	37	34	-----	3	-----	15,198	-----	
\$1 - \$19,999-----	4	-----	1,818	28,942	37	34	-----	3	-----	15,198	-----	
Tennessee, total-----	12	1	103,201	1,059,517	721	711	10	-----	-----	506,977	37,050	
\$1 - \$19,999-----	3	-----	10,853	123,657	169	164	5	-----	-----	105,594	9,440	
\$20,000 - \$49,999-----	2	-----										
\$50,000 - \$99,999-----	3	-----	92,348	935,860	552	547	5	-----	-----	401,383	27,640	
\$100,000 - \$249,999-----	4	1										
Other States, total-----	22	2	176,321	1,443,726	614	590	22	2	2	534,655	38,314	
\$1 - \$19,999-----	9	1	31,537	287,353	155	142	11	2	2	110,758	15,756	
\$20,000 - \$49,999-----	7	1										
\$50,000 - \$99,999-----	2	-----	144,784	1,156,373	459	448	11	-----	-----	423,887	12,558	
\$100,000 - \$249,999-----	2	-----										
\$250,000 - \$499,999-----	2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	

<sup>1</sup> For definition of the industry see tables 143 and 150, footnote 1. Reports classified by value of products represent a single quarry or mine, or a single quarry or mine and a single preparation plant reported together.

## MINERAL INDUSTRIES

TABLE 159.—SELECTED STATISTICS FOR ROUGH-DIMENSION MARBLE OPERATIONS IN THE UNITED STATES, CLASSIFIED BY QUANTITY OF STONE PRODUCED AND BY STATE: 1939<sup>1</sup>

STATE AND TONS (2,000 POUNDS) OF MARBLE	Number of quarries and mines	Number of preparation plants	Production of marble (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED				Wages	Salaries	
					Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members			
								Total			Performing manual labor
United States, total	38	3	281,340	\$2,532,185	1,372	1,335	32	5	2	\$1,056,830	\$75,394
1 - 249	4	-----	700	25,164	26	22	-----	4	1	8,154	-----
250 - 499	6	-----	3,618	103,700	69	64	5	-----	-----	44,260	6,062
500 - 999	2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1,000 - 1,999	6	1	8,756	90,816	58	54	3	1	1	38,018	4,118
2,000 - 2,999	4	1	9,111	192,866	92	88	4	-----	-----	58,612	5,293
3,000 - 4,999	7	-----	28,371	400,144	313	309	4	-----	-----	225,360	8,440
5,000 - 9,999	1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
10,000 - 24,999	5	1	94,091	837,613	490	477	13	-----	-----	398,841	44,949
25,000 - 49,999	2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
50,000 and over	1	-----	133,693	681,762	324	321	3	-----	-----	283,585	5,732
Tennessee, total	12	1	103,201	1,059,517	721	711	10	-----	-----	506,977	37,080
250 - 499	2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1,000 - 1,999	1	-----	4,144	92,171	70	67	3	-----	-----	40,713	3,950
2,000 - 2,999	1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3,000 - 4,999	4	-----	16,705	287,712	264	261	3	-----	-----	184,527	6,880
10,000 - 24,999	3	1	82,354	679,634	387	383	4	-----	-----	281,737	26,250
25,000 - 49,999	1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Vermont, total	10	-----	83,873	661,845	285	282	2	1	1	282,382	2,860
1 - 249	1	-----	784	44,695	10	9	-----	1	1	9,372	-----
250 - 499	2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
500 - 999	1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1,000 - 1,999	1	-----	4,643	55,583	36	34	2	-----	-----	27,328	2,860
2,000 - 2,999	1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3,000 - 4,999	2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
10,000 - 24,999	1	-----	78,446	561,567	239	239	-----	-----	-----	245,682	-----
25,000 - 49,999	1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Other States, total	16	2	94,266	810,823	366	342	20	4	1	287,471	35,454
1 - 249	3	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
250 - 499	2	-----	2,162	55,586	49	44	2	3	-----	22,772	2,872
500 - 999	1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1,000 - 1,999	4	1	6,018	61,423	39	35	3	1	1	22,851	4,118
2,000 - 2,999	2	1	7,610	156,366	60	57	3	-----	-----	42,499	4,033
3,000 - 4,999	1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
5,000 - 9,999	1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
10,000 - 24,999	1	-----	78,476	537,448	218	206	12	-----	-----	179,349	24,431
25,000 and over	1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

<sup>1</sup> For definition of the industry see tables 143 and 150, footnote 1. Reports classified by quantity of product represent a single quarry or mine, or a single quarry or mine and a single preparation plant reported together.

TABLE 160.—SELECTED STATISTICS FOR ROUGH-DIMENSION MARBLE OPERATIONS IN THE UNITED STATES, CLASSIFIED BY NUMBER OF WAGE EARNERS AND BY STATE: 1939<sup>1</sup>

STATE AND NUMBER OF WAGE EARNERS	Number of quarries and mines	Number of preparation plants	Production of marble (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED				Wages	Salaries	
					Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members			
								Total			Performing manual labor
United States, total	38	3	281,340	\$2,532,185	1,372	1,335	32	5	2	\$1,056,830	\$75,394
1 - 5	6	-----	2,444	41,923	21	16	1	4	2	12,355	583
6 - 20	18	2	36,074	362,523	226	212	13	1	-----	152,250	19,293
21 - 50	4	-----	28,202	273,864	144	141	3	-----	-----	95,371	5,036
51 - 100	6	-----	87,406	707,391	457	449	8	-----	-----	382,487	18,500
101 - 250	4	1	127,214	1,146,484	524	517	7	-----	-----	414,367	31,992
Tennessee, total	12	1	103,201	1,059,517	721	711	10	-----	-----	506,977	37,080
6 - 20	3	-----	1,987	34,993	39	37	2	-----	-----	22,148	2,560
21 - 50	3	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
51 - 100	4	-----	101,214	1,024,524	682	674	8	-----	-----	464,829	34,520
101 - 250	2	1	-----	-----	-----	-----	-----	-----	-----	-----	-----
Other States, total	26	2	178,139	1,472,668	651	624	22	5	2	549,853	38,314
1 - 5	6	-----	2,444	41,923	21	16	1	4	2	12,355	583
6 - 20	15	2	34,087	327,530	187	175	11	1	-----	130,102	16,733
21 - 50	1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
51 - 100	2	-----	141,808	1,103,215	443	433	10	-----	-----	407,396	20,998
101 - 250	2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

<sup>1</sup> For definition of the industry see tables 143 and 150, footnote 1. Reports classified by average number of wage earners employed during the year represent a single quarry or mine, or a single quarry or mine and a single preparation plant reported together.

MARBLE

TABLE 161.—SELECTED STATISTICS FOR ROUGH-DIMENSION MARBLE OPERATIONS IN THE UNITED STATES CLASSIFIED BY NUMBER OF HOURS PER WAGE EARNER IN THE FULL-TIME WORKWEEK, AND BY STATE: 1939<sup>1</sup>

STATE AND HOURS PER WEEK	Number of quarries and mines	Number of preparation plants	Production of marble (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED					Wages	Salaries
					Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members			
								Total	Performing manual labor		
United States, total	38	3	281,340	\$2,532,185	1,372	1,335	32	5	2	\$1,056,830	\$75,394
40-----	19	1	163,027	1,362,983	580	562	13	5	2	503,916	24,982
41 - 42-----	11	1	51,376	756,099	526	514	12	-----	-----	365,768	37,560
43 - 44-----	5	-----	59,072	323,220	152	151	1	-----	-----	114,973	1,360
Unclassified-----	3	1	7,865	89,883	114	109	6	-----	-----	72,173	11,432
Tennessee, total	12	1	103,201	1,059,517	721	711	10	-----	-----	506,977	37,080
41 - 42-----	3	1	40,336	705,378	495	488	7	-----	-----	344,032	30,860
43 - 44-----	3	-----	62,565	353,841	226	223	3	-----	-----	162,945	6,180
Unclassified-----	1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Vermont, total	10	-----	83,873	661,845	285	282	2	1	1	282,362	2,860
40-----	10	-----	83,873	661,845	285	282	2	1	1	282,362	2,860
Other States, total	16	2	94,266	810,823	366	342	20	4	1	267,471	35,454
40-----	9	1	79,154	701,138	295	280	11	4	1	221,534	22,122
41 - 42-----	3	-----	10,740	50,423	31	26	5	-----	-----	21,756	6,700
43 - 44-----	2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Unclassified-----	2	1	4,372	59,262	40	36	4	-----	-----	24,201	6,832

<sup>1</sup> For definition of the industry see tables 143 and 150, footnote 1. Reports were classified by number of hours in the full-time workweek reported for wage earners in that department of the operation for which the largest number of man-hours worked was reported. Statistics shown for "Unclassified" represent reports on which number of hours was not reported.

TABLE 162.—SELECTED STATISTICS FOR ROUGH-DIMENSION MARBLE OPERATIONS IN THE UNITED STATES, CLASSIFIED BY NUMBER OF DAYS ACTIVE DURING THE YEAR: 1939<sup>1</sup>

NUMBER OF DAYS ACTIVE DURING YEAR	Number of quarries and mines	Number of preparation plants	Production of marble (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED					Wages	Salaries
					Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members			
								Total	Performing manual labor		
United States, total	38	3	281,340	\$2,532,185	1,372	1,335	32	5	2	\$1,056,830	\$75,394
1 - 49-----	1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
50 - 99-----	4	-----	7,964	80,036	47	44	-----	3	2	27,167	-----
100 - 149-----	2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
150 - 199-----	5	-----	25,866	197,620	105	97	6	2	-----	74,840	8,957
200 - 224-----	2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
225 - 249-----	10	2	84,932	837,015	405	396	9	-----	-----	268,437	35,320
250 - 274-----	13	1	-----	-----	-----	-----	-----	-----	-----	-----	-----
275 - 299-----	1	-----	165,578	1,417,514	815	798	17	-----	-----	686,586	31,117

<sup>1</sup> For definition of the industry see tables 143 and 150, footnote 1. Reports classified by number of days active represent a single quarry or mine, or a single quarry or mine and a single preparation plant reported together; such reports were classified by number of days the quarry or mine was in operation for production or development purposes during the year.

TABLE 163.—SELECTED STATISTICS FOR ROUGH-DIMENSION MARBLE OPERATIONS IN THE UNITED STATES, CLASSIFIED BY OUTPUT PER MAN-HOUR AND BY STATE: 1939<sup>1</sup>

STATE AND TONS OF MARBLE PER MAN-HOUR	Number of quarries and mines	Number of preparation plants	Production of marble (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED					Wages	Salaries
					Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members			
								Total	Performing manual labor		
United States, total	38	3	281,340	\$2,532,185	1,372	1,335	32	5	2	\$1,056,830	\$75,394
Less than 0.050-----	17	-----	38,760	744,376	581	565	12	4	1	389,582	20,348
0.050 - 0.099-----	8	2	36,030	477,881	277	265	12	-----	-----	214,421	41,848
0.100 - 0.149-----	6	1	56,612	452,765	192	190	2	-----	-----	192,071	2,467
0.150 - 0.199-----	2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
0.200 - 0.299-----	3	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
0.300 - 0.399-----	1	-----	149,938	857,163	322	315	6	1	1	260,756	10,731
Unclassified-----	1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Tennessee, total	12	1	103,201	1,059,517	721	711	10	-----	-----	506,977	37,080
Less than 0.050-----	8	-----	34,307	564,950	488	480	8	-----	-----	336,668	14,480
0.050 - 0.099-----	2	1	-----	-----	-----	-----	-----	-----	-----	-----	-----
0.200 - 0.299-----	1	-----	68,894	494,567	233	231	2	-----	-----	170,309	22,600
0.300 - 0.399-----	1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Vermont, total	10	-----	83,873	661,845	285	282	2	1	1	282,362	2,860
Less than 0.050-----	3	-----	1,077	46,437	19	17	1	1	1	15,376	1,430
0.050 - 0.099-----	1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
0.100 - 0.149-----	4	-----	82,796	615,408	266	265	1	-----	-----	267,006	1,430
0.150 - 0.199-----	2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Other States, total	16	2	94,266	810,823	366	342	20	4	1	267,471	35,454
Less than 0.050-----	6	-----	3,376	132,989	74	68	3	3	-----	37,538	4,438
0.050 - 0.099-----	5	1	20,366	200,897	136	127	9	-----	-----	119,854	17,818
0.100 - 0.149-----	2	1	-----	-----	-----	-----	-----	-----	-----	-----	-----
0.200 - 0.299-----	2	-----	70,524	476,937	156	147	8	1	1	110,079	13,198
Unclassified-----	1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

<sup>1</sup> For definition of the industry see tables 143 and 150, footnote 1. Reports classified by output per man-hour represent a single quarry or mine, or a single quarry or mine and a single preparation plant reported together. Statistics shown for "Unclassified" represent a report on which figures were not adequately reported for classification.

## Miscellaneous Stone

Operations<sup>1</sup> engaged principally in quarrying and crushing miscellaneous stone had products in 1939 valued at \$2,528,000 and provided employment for an average of 858 wage earners.<sup>2</sup>

<sup>1</sup>The statistics cover only producing operations whose value of products, reported principal expense, or cost of buildings, machinery, and equipment during the year amounted to \$2,500 or more.

<sup>2</sup>The statistics presented in this report cover miscellaneous-stone operations whose production enters into the usual channels of commerce. Thus the figures exclude quarries operated by governmental agencies, public utilities, and construction companies or contractors producing stone wholly for their own use or on contract for a governmental agency.

Less than 1 percent of the product represented rough-dimension blocks or slabs. The remainder was crushed and broken stone, of which about 83 percent was for use as concrete aggregate and road metal. The balance was for various other uses, principally riprap and railroad ballast.

The report covers operations engaged principally in the production of light-color volcanic rocks, schists, boulders, serpentine, and various unspecified kinds of stone produced by operations other than those classified in the basalt, granite, limestone, marble, sandstone, slate, and other industries.

TABLE 164.—PRINCIPAL STATISTICS FOR THE MISCELLANEOUS-STONE INDUSTRY IN THE UNITED STATES: 1939 AND 1929<sup>1</sup>

ITEM	1939	1929	ITEM	1939	1929
Number of quarries-----	61	234	Cost of machinery and equipment erected or installed during year-----	\$165,402	\$382,695
Production of miscellaneous stone (tons of 2,000 pounds)-----	2,636,776	7,834,000	Horsepower rating of power equipment, total-----	21,247	28,527
Value of products, total-----	\$2,527,948	\$8,475,008	Per wage earner-----	24.8	15.5
Miscellaneous stone-----	\$2,399,257	\$8,117,809	Prime movers-----	10,339	9,091
Other products and services rendered-----	\$128,691	\$357,199	Electric motors driven by purchased energy-----	10,908	19,436
Number of persons engaged, total-----	967	2,305	Horsepower rating of electric motors driven by energy generated by reporting companies-----	150	113
Wage earners (average for the year, including inactive periods)-----	858	1,841	Fuels consumed:-----		
Salaried employees-----	79	303	Anthracite (tons of 2,000 pounds)-----	453	19
Proprietors and firm members-----	30	161	Bituminous coal (tons of 2,000 pounds)-----	564	11,465
Principal expenses designated below, total-----	\$1,521,430	\$5,263,398	Fuel oils (barrels of 42 gallons)-----	8,083	42,636
Wages-----	\$800,183	\$2,405,906	Gasoline and kerosene (gallons)-----	523,633	434,971
Salaries-----	\$189,618	\$730,679	Natural gas (thousands of cubic feet)-----	-----	67,200
Supplies and materials-----	\$313,580	\$1,628,968	Electric energy consumed (thousands of kw.-hrs.), total-----	5,587	16,283
Fuel-----	\$100,657	\$188,576	Purchased-----	5,583	16,286
Purchased electric energy-----	\$94,733	\$237,213	Generated by reporting companies-----	4	-----
Contract work-----	\$22,709	\$52,056			

<sup>1</sup>Represents operations (quarries, mines, crushing, screening, or washing plants, or mines or quarries and plants operated together) engaged principally in quarrying and crushing light-color volcanic rocks, schist, boulders, serpentine, and various unspecified kinds of stone produced by operations other than those classified in the basalt, granite, limestone, marble, sandstone, or slate industries; figures exclude, however, stone produced by Federal, State, and local governments, public utilities, and operators who produce stone exclusively for their own use in buildings, highway construction work, or on contract for a governmental agency. Statistics for 1939 represent operations whose total value of products; designated principal expenses; or cost of buildings, machinery, or equipment erected or installed during the year amounted to \$2,500 or more. Figures for 1929 refer to "enterprises" whose output was valued at \$2,500 or for which cost of development work amounted to at least \$2,500. For census years prior to 1929 the data for production of miscellaneous stone are included in the figures for the other stone industries (principally basalt and sandstone). Statistics cover quarrying, stone crushing, and rough-dimension stone-trimming operations. For 1929, figures also include some dimension-stone dressing at operations for which quarry data could not be segregated.

TABLE 165.—SUMMARY STATISTICS FOR THE MISCELLANEOUS-STONE INDUSTRY IN THE UNITED STATES, BY STATE: 1939 AND 1929<sup>1</sup>

STATE AND CENSUS YEAR	Number of quarries and mines	Production of miscellaneous stone (tons of 2,000 pounds)	Value of all products	Number of wage earners (average for the year)	Number of salaried employees	PRINCIPAL EXPENSES DESIGNATED BELOW					Aggregate horsepower rating of power equipment
						Total	Wages	Salaries	Supplies and materials, fuel, and purchased electric energy	Contract work	
United States:											
1939-----	61	2,636,776	\$2,527,948	858	79	\$1,521,430	\$800,183	\$189,618	\$508,920	\$22,709	21,247
1929-----	234	7,834,000	8,475,008	1,841	<sup>2</sup> 303	\$5,263,398	2,405,906	\$730,679	2,074,757	52,056	28,527
California:											
1939-----	16	861,493	470,809	81	13	211,550	101,994	33,430	75,136	-----	5,388
1929-----	64	4,188,000	3,789,013	491	125	2,155,204	802,430	337,440	1,007,886	7,448	12,283
Maryland:											
1939-----	3	24,786	53,404	23	2	27,126	18,495	2,663	5,967	-----	390
1929-----	5	49,000	69,852	31	1	46,377	37,398	525	8,454	-----	120
Massachusetts:											
1939-----	4	258,009	281,483	99	10	205,852	119,616	48,260	37,976	-----	1,981
1929-----	6	204,000	314,228	88	5	297,991	149,434	12,740	185,817	-----	740
Pennsylvania:											
1939-----	8	140,821	346,242	99	12	260,633	93,468	16,558	144,306	6,306	3,360
1929-----	30	339,000	568,783	168	13	344,906	210,360	28,257	99,107	7,132	2,114
Other States:											
1939-----	30	1,351,667	1,376,010	556	42	815,269	466,619	88,712	244,535	16,403	10,123
1929-----	129	3,054,000	3,783,132	1,063	98	2,253,924	1,206,284	186,721	823,493	37,426	13,265

<sup>1</sup>For definition of the industry and explanation regarding the extent of comparability of statistics for 1939 and 1929 see table 164, footnote 1.

<sup>2</sup>Includes statistics for 61 salaried employees paid \$164,996 at central administrative offices not distributed by State.

MISCELLANEOUS STONE

TABLE 166.—PRINCIPAL STATISTICS FOR CRUSHED AND BROKEN MISCELLANEOUS-STONE OPERATIONS IN THE UNITED STATES, BY STATE: 1939<sup>1</sup>

ITEM	United States	California	Florida	Maryland	Massachusetts	Pennsylvania	Rhode Island	Texas	Other States <sup>2</sup>
Number of operating companies-----	60	16	3	3	4	8	3	3	20
Number of quarries and mines-----	61	16	3	3	4	8	3	3	21
Number of preparation plants (crushing, screening, washing, and storage)-----	52	11	3	1	4	7	3	3	20
Number of persons engaged, total-----	967	105	53	26	112	114	54	33	470
Wage earners (average for the year)-----	858	81	46	23	99	99	44	28	438
Salaries employees-----	79	13	5	2	10	12	10	4	23
Proprietors and firm members-----	30	11	2	1	3	3	-----	1	9
Performing manual labor-----	17	7	-----	-----	2	1	-----	1	6
Production of miscellaneous stone: Tons of 2,000 pounds, total-----	2,636,776	861,493	45,263	24,786	258,009	140,821	119,912	58,799	1,127,693
From underground mines-----	2,636,776	861,493	45,263	24,786	258,009	140,821	119,912	58,799	1,127,693
From open quarries-----									
Value at quarries and mines-----	\$2,399,257	\$404,167	\$109,220	\$53,404	\$281,483	\$329,249	\$180,277	\$64,061	\$977,396
Value of all products-----	\$2,527,948	\$470,809	\$109,220	\$53,404	\$281,483	\$346,242	\$180,277	\$77,517	\$1,008,996
Principal expenses designated below, total-----	\$1,521,430	\$211,550	\$39,223	\$27,126	\$205,852	\$260,633	\$138,501	\$57,926	\$580,619
Wages-----	\$800,183	\$101,984	\$21,208	\$18,496	\$119,616	\$93,468	\$67,194	\$20,767	\$357,450
Salaries-----	\$189,618	\$33,430	\$5,830	\$2,663	\$43,260	\$15,553	\$15,120	\$11,505	\$55,207
Supplies and materials-----	\$313,530	\$28,342	\$5,983	\$2,508	\$14,390	\$111,652	\$36,938	\$17,745	\$95,972
Fuel-----	\$100,657	\$27,782	\$3,539	\$3,079	\$11,431	\$11,790	\$10,215	\$7,670	\$25,151
Purchased electric energy-----	\$94,733	\$20,012	\$2,613	\$380	\$12,155	\$20,864	\$8,034	\$239	\$30,436
Contract work-----	\$22,709	-----	-----	-----	-----	\$6,306	-----	-----	\$16,403
Cost of buildings, machinery, and equipment erected or installed during year-----	\$199,207	\$52,129	\$4,300	-----	\$2,000	\$19,044	\$4,562	\$85	\$117,097
Buildings-----	\$33,805	\$9,305	\$300	-----	\$2,000	\$1,000	\$2,024	-----	\$19,176
Machinery and equipment, total-----	\$165,402	\$42,824	\$4,000	-----	-----	\$18,044	\$2,538	\$85	\$97,921
Purchased in new condition-----	\$135,711	\$40,768	-----	-----	-----	\$15,144	\$2,528	-----	\$77,271
Purchased in used condition-----	\$29,691	\$2,056	\$4,000	-----	-----	\$2,900	-----	\$85	\$20,650
Total number of man-shifts worked by wage earners-----	244,198	19,909	9,832	8,835	27,471	22,812	13,705	7,909	133,725
Total number of man-hours worked by wage earners-----	1,970,229	161,869	78,653	73,128	219,772	187,165	109,640	63,274	1,077,238
Average number of hours worked per shift-----	8.1	8.1	8.0	8.3	8.0	8.2	8.0	8.0	8.1
Average hourly earning of wage earners-----	\$0.41	\$0.63	\$0.27	\$0.25	\$0.54	\$0.50	\$0.61	\$0.33	\$0.33
Tons of miscellaneous stone produced per man-hour, all mines-----	1.34	5.34	0.58	0.34	1.17	0.75	1.09	0.93	1.05
At underground mines-----	1.34	5.34	0.58	0.34	1.17	0.75	1.09	0.93	1.05
At open quarries-----									
Average number of equivalent full days operations were active, all mines-----	243	222	201	245	218	217	202	264	267
Underground mines-----	243	222	201	245	218	217	202	264	267
Open quarries-----									
Horsepower rating of power equipment, total-----	21,247	5,388	794	390	1,961	3,360	1,443	889	6,997
Per wage earner-----	24.8	66.5	17.3	17.0	20.0	33.9	32.9	31.8	16.0
Stationary equipment <sup>3</sup> -----	11,151	2,735	340	58	183	2,510	908	197	4,220
Mobile equipment <sup>4</sup> -----	10,096	2,653	454	332	1,798	850	540	692	2,777
Electric energy consumed (thousands of kw. -hrs.), total-----	5,587	982	106	8	406	942	619	7	2,517
Purchased-----	5,583	982	106	8	406	942	619	7	2,513
Generated by reporting companies-----	4	-----	-----	-----	-----	-----	-----	-----	4

<sup>1</sup> For definition of the miscellaneous-stone industry see table 164, footnote 1. All miscellaneous-stone operations were engaged principally in the production of crushed and broken stone. These operations also produced a small amount of rough-dimension stone.

<sup>2</sup> Represents Alabama, Arizona, Arkansas, Georgia, Illinois, Michigan, Minnesota, Missouri, Nevada, New Jersey, New York, North Carolina, Ohio, Oklahoma, Oregon, Virginia, and Washington.

<sup>3</sup> Aggregate horsepower rating of engines, motors, etc. used for driving stationary or fixed equipment such as hoists, screens, crushers, compressors, etc.

<sup>4</sup> Aggregate horsepower rating of engines, motors, etc. used for driving mobile equipment such as power shovels, locomotives, trucks, tractors, churn drills, etc.

## MINERAL INDUSTRIES

TABLE 167.—QUANTITY AND VALUE OF PRODUCTS OF CRUSHED AND BROKEN MISCELLANEOUS-STONE OPERATIONS IN THE UNITED STATES, BY TYPE OF PRODUCT AND BY STATE: 1939<sup>1</sup>

ITEM	UNITED STATES		CALIFORNIA		FLORIDA		MARYLAND	
	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value
All products, total	(2)	\$2,527,948	(2)	\$404,167	45,265	\$109,220	24,786	\$53,404
All stone produced, total <sup>3</sup>	2,636,776	2,399,257	861,493	470,809	45,263	109,220	24,786	53,404
Rough-dimension stone, total	12,364	19,662						
Irregular-shaped stone for buildings, foundations, sea walls, bridges, etc.	10,064	13,062						
For architecture (buildings and other high-class construction work)	2,000	6,000						
For other uses	300	600						
Crushed, broken, and ground stone, total	2,624,412	2,379,595	861,493	404,167	45,263	109,220	24,786	53,404
Riprap	181,832	156,993	131,659	76,514	300	800	17,786	39,404
Concrete and road metal	2,190,294	1,775,857	899,575	303,890	44,963	109,620	7,000	14,000
Railroad ballast	166,444	123,685	28,321	19,577				
Metallurgical (furnace flux)	3,697	555						
Refractory (ganister, mica schist, etc.)	2,930	8,790						
For cement manufacture	6,954	9,080						
For other uses	72,261	304,635	11,938	4,186				
Secondary products (gold-and silver-ore, sand and gravel, and top soil)	(2)	109,327	(2)	63,721				
Amount received or due for services performed for others	(2)	19,364	(2)	2,921				

  

ITEM	MASSACHUSETTS		PENNSYLVANIA		RHODE ISLAND		TEXAS		OTHER STATES	
	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value	Tons of 2,000 pounds	Value
All products, total	258,009	\$281,483	(2)	\$529,249	119,912	\$180,277	(2)	\$64,061	(2)	\$977,396
All stone produced, total <sup>3</sup>	258,009	281,483	140,821	346,242	119,912	180,277	58,799	77,517	1,127,693	1,008,996
Rough-dimension stone, total			10,364	13,662					2,000	6,000
Irregular-shaped stone for buildings, foundations, sea walls, bridges, etc.			10,064	13,062						
For architecture (buildings and other high-class construction work)									2,000	6,000
For other uses			300	600						
Crushed, broken, and ground stone, total	258,009	281,483	130,457	315,567	119,912	180,277	58,799	64,061	1,125,693	971,396
Riprap	12,588	17,301			717	717			18,802	22,457
Concrete and road metal	245,441	264,182	102,378	118,439	119,195	179,560	22,157	34,422	859,585	752,744
Railroad ballast							36,842	28,639	101,481	74,489
Metallurgical (furnace flux)									3,997	555
Refractory (ganister, mica schist, etc.)			2,430	7,290					500	1,500
For cement manufacture									6,954	9,080
For other uses			25,649	189,858					34,674	110,591
Secondary products (gold-and silver-ore, sand and gravel, and top soil)			(2)	550			(2)	13,456	(2)	31,800
Amount received or due for services performed for others			(2)	16,443						

<sup>1</sup>For definition of the industry see tables 164 and 166, footnote 1.

<sup>2</sup>Not significant.

<sup>3</sup>Represents the sum of statistics for "Rough-dimension stone" and "Crushed, broken, and ground stone."

TABLE 168.—NUMBER OF WAGE EARNERS AT CRUSHED AND BROKEN MISCELLANEOUS STONE OPERATIONS IN THE UNITED STATES, BY TYPE OF OPERATION, BY STATE, AND BY MONTH: 1939<sup>1</sup>

TYPE OF OPERATION AND STATE	Average for the 12 months	NUMBER RECEIVING PAY DURING PAY-ROLL PERIOD ENDING NEAREST THE 15TH OF THE MONTH											
		January	February	March	April	May	June	July	August	September	October	November	December
United States, total	858	583	591	658	946	992	1,034	1,049	1,056	1,022	874	793	703
TYPE OF OPERATION													
Quarries only	54	41	49	42	49	55	63	64	70	63	54	49	51
Quarries and preparation plants operated together	804	542	542	616	897	937	971	985	986	959	820	744	652
STATE													
California	81	85	89	75	73	75	82	73	88	97	87	77	75
Florida	46	49	44	41	38	44	50	55	49	50	45	48	45
Maryland	23	14	14	13	19	26	35	35	34	27	26	20	15
Massachusetts	99	42	41	41	127	127	127	127	127	117	100	109	105
Pennsylvania	99	36	47	68	128	107	119	133	121	105	119	104	104
Rhode Island	44	19	22	18	41	59	63	48	62	60	56	42	37
Texas	28	22	21	29	28	35	30	33	26	34	35	25	17
Other States	438	314	313	373	494	521	528	545	549	532	406	368	309

<sup>1</sup>For definition of the industry see tables 164 and 166, footnote 1.

TABLE 169.—EMPLOYMENT AND WORKING TIME AT CRUSHED AND BROKEN MISCELLANEOUS-STONE OPERATIONS IN THE UNITED STATES, BY DEPARTMENT AND BY STATE: 1939 <sup>1</sup>

DEPARTMENT	United States	California	Florida	Maryland	Massachusetts	Pennsylvania	Rhode Island	Texas	Other States
Average number of wage earners on active days, total	992	82	48	36	126	105	68	30	497
At quarries and mines, total	723	69	26	33	109	71	46	19	350
Underground	40					25			15
Open-cut	668	67	24	33	109	46	40	19	330
Surface shops and yards	15	2	2				6		5
At preparation plants	269	13	22	3	17	34	22	11	147
Average number of equivalent full days operations were active	243	222	201	245	218	217	202	264	267
At quarries and mines, total	247	222	210	255	215	221	215	259	272
Underground	205					238			151
Open-cut	251	220	200	255		212	243	259	218
Surface shops and yards	166	300	325				32		209
At preparation plants	235	223	190	136	235	209	173	272	254
Number of man-shifts worked by wage earners, total <sup>2</sup>	244,198	19,909	9,632	8,635	27,471	22,612	13,705	7,909	133,725
On active days, total <sup>2</sup>	241,056	18,209	9,632	8,635	27,441	22,612	13,705	7,909	132,513
At quarries and mines, total	178,379	15,311	5,461	8,427	23,442	15,696	9,691	4,915	95,236
Underground	8,203					5,939			2,264
Open-cut	167,691	14,711	4,611	8,427	23,442	9,757	9,701	4,915	91,927
Surface shops and yards	2,485	600	650				190		1,045
At preparation plants	62,677	2,898	4,171	408	3,999	7,116	3,614	2,994	37,277
On inactive days	3,142	1,700	200		30				1,212
Number of man-hours worked by wage earners, total	1,970,229	161,369	78,653	73,128	219,772	187,165	109,640	63,274	1,077,228
On active days, total	1,945,087	147,771	77,053	73,128	219,532	187,165	109,640	63,274	1,067,524
At quarries and mines, total	1,438,755	123,688	43,687	69,048	187,537	129,332	79,126	39,326	767,009
Underground	65,621					47,509			18,112
Open-cut	1,352,654	118,288	38,487	69,048	187,537	81,823	77,608	39,326	740,537
Surface shops and yards	20,480	5,400	5,200				1,520		8,360
At preparation plants	506,332	24,083	33,366	4,080	31,995	57,833	30,512	23,948	300,515
On inactive days	25,142	13,598	1,600		240				9,704

<sup>1</sup> For definition of the industry see tables 164 and 166, footnote 1.  
<sup>2</sup> Of the total, 40,173 man-shifts were reported worked during a second shift.

TABLE 170.—QUANTITY OF FUEL AND ELECTRIC ENERGY CONSUMED AT CRUSHED AND BROKEN MISCELLANEOUS-STONE OPERATIONS IN THE UNITED STATES, BY TYPE OF OPERATION AND BY STATE: 1939 <sup>1</sup>

TYPE OF OPERATION AND STATE	FUEL <sup>2</sup>				ELECTRIC ENERGY (thousands of kilowatt-hours)		
	Anthracite (tons of 2,000 pounds)	Bituminous coal (tons of 2,000 pounds)	Fuel oils (barrels of 42 gallons)	Gasoline and kerosene (gallons)	Total	Purchased	Generated by reporting companies
United States, total	453	664	8,083	523,635	5,587	5,583	4
TYPE OF OPERATION							
Quarries only			800	28,181	397	397	
Quarries or mines and preparation plants operated together	453	664	7,283	495,452	5,190	5,186	4
STATE							
California			5,470	168,838	982	982	
Florida			229	9,740	106	106	
Maryland		100		16,213	8	8	
Massachusetts			746	71,825	406	406	
Pennsylvania		35	1,251	48,790	942	942	
Rhode Island	451	233		39,550	619	619	
Texas			605	55,425	7	7	
Other States	22	296	1,802	113,252	2,517	2,513	4

<sup>1</sup> For definition of the industry see tables 164 and 166, footnote 1.  
<sup>2</sup> No natural gas was reported consumed.

TABLE 171.—NUMBER AND HORSEPOWER RATING OF PRIME MOVERS AND ELECTRIC MOTORS AT CRUSHED AND BROKEN MISCELLANEOUS-STONE OPERATIONS IN THE UNITED STATES, BY TYPE OF OPERATION AND BY STATE: 1939<sup>1</sup>

TYPE OF OPERATION, STATE, AND TYPE OF EQUIPMENT	PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY										ELECTRIC MOTORS DRIVEN BY ENERGY GENERATED BY REPORTING COMPANIES		
	Aggre- gate horse- power	Prime movers								Electric motors driven by pur- chased energy		Number	Horsepower
		Total		Driving generators		Not driving generators		Ordinarily idle (included in pre- ceding columns)		Number	Horse- power		
		Number	Horse- power	Number	Horse- power	Number	Horse- power	Number	Horse- power				
United States, total	21,247	195	10,339	2	200	193	10,139	1	30	429	10,908	4	150
Stationary	11,151	38	1,738	2	200	36	1,538			382	9,413	4	150
Mobile	10,096	157	8,601			157	8,601	1	30	47	1,495		
TYPE OF OPERATION													
Quarries only, total	2,117	16	828			16	828			49	1,289		
Stationary	1,025	1	100			1	100			41	925		
Mobile	1,092	15	728			15	728			8	364		
Quarries and mines and preparation plants operated together, total	19,130	179	9,511	2	200	177	9,511	1	30	380	9,619	4	150
Stationary	10,128	37	1,638	2	200	35	1,438			341	8,488	4	150
Mobile	9,004	142	7,873			142	7,873	1	30	39	1,131		
STATE													
California, total	5,388	42	2,407			42	2,407			140	2,981		
Stationary	2,735									135	2,735		
Mobile	2,653	42	2,407			42	2,407			5	246		
Florida, total	794	10	629			10	629			4	165		
Stationary	340	4	175			4	175			4	165		
Mobile	454	6	454			6	454						
Maryland, total	390	4	206			4	206			5	184		
Stationary	58	2	58			2	58						
Mobile	332	2	148			2	148			5	184		
Massachusetts, total	1,981	17	1,259			17	1,259			54	722		
Stationary	183	2	80			2	80			6	103		
Mobile	1,798	15	1,179			15	1,179			28	619		
Pennsylvania, total	3,360	20	1,005			20	1,005			124	2,355		
Stationary	2,510	5	210			5	210			122	2,300		
Mobile	850	15	795			15	795			2	55		
Rhode Island, total	1,448	14	429			14	429			24	1,019		
Stationary	908	2	60			2	60			21	848		
Mobile	540	12	369			12	369			3	171		
Texas, total	889	16	879			16	879	1	30	2	10		
Stationary	197	5	187			5	187			2	10		
Mobile	692	11	692			11	692	1	30				
Other States, total	6,897	72	3,525	2	200	70	3,325			96	3,472	4	150
Stationary	4,220	18	968	2	200	16	768			92	3,252	4	150
Mobile	2,777	54	2,557			54	2,557			4	220		

<sup>1</sup>For definition of the industry see tables 164 and 166, footnote 1.

MISCELLANEOUS STONE

TABLE 172.—NUMBER OF POWER-LOADING MACHINES AT CRUSHED AND BROKEN MISCELLANEOUS-STONE OPERATIONS IN THE UNITED STATES, BY TYPE, BY KIND OF POWER USED, BY SIZE, AND BY STATE: 1939<sup>1</sup>

TYPE, KIND OF POWER USED, AND SIZE	United States	California	Florida	Maryland	Massachusetts	Pennsylvania	Rhode Island	Texas	Other States
Power shovels, total-----	54	19	-----	2	4	6	6	1	16
Kind of power used:									
Steam-----	13	3	-----	-----	-----	1	3	-----	6
Electric-----	10	3	-----	-----	-----	1	3	-----	2
Internal-combustion engine-----	31	13	-----	2	3	4	-----	1	8
Dipper capacity (cu. yds.):									
Less than 3-----	53	19	-----	2	4	6	6	1	15
3 to 5-----	1	-----	-----	-----	-----	-----	-----	-----	1
Dragline excavators <sup>2</sup> -----	6	3	1	-----	-----	-----	-----	2	-----
Scraper loaders, total-----	8	-----	-----	-----	-----	2	-----	-----	6
Kind of power used:									
Electric-----	4	-----	-----	-----	-----	-----	-----	-----	4
Internal-combustion engine-----	4	-----	-----	-----	-----	2	-----	-----	2
Horsepower rating of hoists:									
10 to 25-----	2	-----	-----	-----	-----	2	-----	-----	-----
26 to 100-----	6	-----	-----	-----	-----	-----	-----	-----	6
Clamshell or orange-peel loaders, total-----	19	8	1	-----	3	-----	-----	1	6
Kind of power used:									
Steam-----	6	5	-----	-----	-----	-----	-----	-----	1
Electric-----	1	-----	-----	-----	-----	-----	-----	-----	1
Internal-combustion engine-----	12	3	1	-----	3	-----	-----	1	4
Cranes and hoists, total-----	3	-----	-----	-----	3	-----	-----	-----	-----
Kind of power used:									
Electric-----	1	-----	-----	-----	1	-----	-----	-----	-----
Internal-combustion engine-----	2	-----	-----	-----	2	-----	-----	-----	-----
Other types, total <sup>3</sup> -----	6	-----	-----	-----	-----	-----	2	-----	4
Kind of power used:									
Steam-----	1	-----	-----	-----	-----	-----	-----	-----	1
Internal-combustion engine-----	5	-----	-----	-----	-----	-----	2	-----	3

<sup>1</sup>For definition of the industry see tables 164 and 166, footnote 1.

<sup>2</sup>Driven by internal-combustion engines; bucket capacities less than 3 cubic yards.

<sup>3</sup>Represents bucket-type loaders.

TABLE 173.—SELECTED STATISTICS FOR INCORPORATED AND UNINCORPORATED OPERATING COMPANIES ENGAGED IN CRUSHED AND BROKEN MISCELLANEOUS-STONE OPERATIONS IN THE UNITED STATES, BY STATE: 1939<sup>1</sup>

STATE AND TYPE OF OWNERSHIP	Number of operating companies	Number of quarries and mines	Number of preparation plants	Production of miscellaneous stone (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED				Wages	Salaries
						Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members		
United States, total-----	80	61	52	2,636,776	\$2,527,948	987	858	79	30	\$800,183	\$189,618
Incorporated-----	30	31	26	1,936,593	1,942,647	699	654	65	-----	611,473	172,499
Unincorporated-----	50	30	26	698,363	585,301	288	224	14	30	188,710	17,119
California, total-----	16	16	11	861,493	470,809	105	81	13	11	101,984	33,430
Incorporated-----	9	9	6	489,428	339,672	62	51	11	-----	70,903	30,664
Unincorporated-----	7	7	5	372,065	131,137	43	30	2	11	31,081	2,766
Florida, total-----	3	3	3	45,263	109,220	53	46	5	2	21,208	5,880
Incorporated-----	2	2	2	45,263	109,220	53	46	5	2	21,208	5,880
Unincorporated-----	1	1	1	-----	-----	-----	-----	-----	-----	-----	-----
Maryland, total-----	3	3	1	24,786	53,404	26	23	2	1	18,496	2,663
Incorporated-----	2	2	-----	-----	-----	-----	-----	-----	-----	-----	-----
Unincorporated-----	1	1	1	24,786	53,404	26	23	2	1	18,496	2,663
Massachusetts, total-----	4	4	4	258,009	281,483	112	99	10	3	119,616	48,260
Incorporated-----	1	1	1	-----	-----	-----	-----	-----	-----	-----	-----
Unincorporated-----	3	3	3	258,009	281,483	112	99	10	3	119,616	48,260
Pennsylvania, total-----	8	8	7	140,821	346,243	114	99	12	3	93,468	16,553
Incorporated-----	2	2	2	-----	-----	-----	-----	-----	-----	-----	-----
Unincorporated-----	6	6	5	140,821	346,243	114	99	12	3	93,468	16,553
Rhode Island <sup>2</sup> -----	3	3	3	119,912	180,277	54	44	10	-----	67,194	16,120
Texas, total-----	3	3	3	58,799	77,517	33	28	4	1	20,767	11,505
Incorporated-----	2	2	2	58,799	77,517	33	28	4	1	20,767	11,505
Unincorporated-----	1	1	1	-----	-----	-----	-----	-----	-----	-----	-----
Other States, total-----	20	21	20	1,127,693	1,008,996	470	436	23	9	357,450	55,207
Incorporated-----	9	10	10	1,052,776	883,757	387	366	21	-----	311,520	53,707
Unincorporated-----	11	11	10	74,917	125,239	83	72	2	9	45,930	1,500

<sup>1</sup>For definition of the industry see tables 164 and 166, footnote 1.

<sup>2</sup>All companies were incorporated.

TABLE 174.—SELECTED STATISTICS FOR CRUSHED AND BROKEN MISCELLANEOUS-STONE OPERATIONS IN THE UNITED STATES, CLASSIFIED BY VALUE OF PRODUCTS AND BY STATE: 1939<sup>1</sup>

STATE AND VALUE OF PRODUCTS	Number of quarries and mines	Number of preparation plants	Production of miscellaneous stone (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED					Wages	Salaries
					Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members			
								Total	Performing manual labor		
United States, total	61	52	2,636,776	\$2,527,948	967	858	79	30	17	\$800,183	\$189,619
\$1 - \$19,999	29	22	380,141	318,280	196	160	17	19	10	121,309	26,482
\$20,000 - \$49,999	20	19	897,081	847,798	228	190	26	10	7	176,187	56,417
\$50,000 - \$99,999	4	5	170,150	323,504	60	52	7	1	-----	53,604	13,739
\$100,000 - \$249,999	5	3	546,634	768,745	236	213	23	-----	-----	232,420	72,480
\$250,000 - \$499,999	1	1	-----	-----	-----	-----	-----	-----	-----	-----	-----
Unclassified	2	2	692,770	469,623	249	243	6	-----	-----	216,653	20,500
California, total	16	11	861,493	470,809	105	81	13	11	7	101,984	33,430
\$1 - \$19,999	6	2	153,575	61,887	29	23	3	3	-----	21,469	5,464
\$20,000 - \$49,999	8	8	-----	-----	-----	-----	-----	-----	-----	-----	-----
\$50,000 - \$99,999	2	1	707,918	408,922	76	58	10	8	7	80,515	27,966
Florida, total	3	3	45,263	109,220	53	46	5	2	-----	21,208	5,880
\$20,000 - \$49,999	3	3	45,263	109,220	53	46	5	2	-----	21,208	5,880
Pennsylvania, total	8	7	140,821	346,242	114	99	12	3	1	93,468	16,553
\$1 - \$19,999	4	3	48,499	54,015	34	29	3	2	1	22,217	3,290
\$20,000 - \$49,999	2	2	-----	-----	-----	-----	-----	-----	-----	-----	-----
\$50,000 - \$99,999	1	1	92,322	292,227	80	70	9	1	-----	71,251	13,273
\$100,000 - \$249,999	1	1	-----	-----	-----	-----	-----	-----	-----	-----	-----
Other States, total	34	31	1,589,199	1,601,877	695	632	49	14	9	583,523	133,755
\$1 - \$19,999	19	17	128,067	202,378	133	108	11	14	9	77,623	17,739
\$20,000 - \$49,999	7	6	223,132	244,103	94	83	11	-----	-----	76,412	27,897
\$50,000 - \$99,999	1	1	-----	-----	-----	-----	-----	-----	-----	-----	-----
\$100,000 - \$249,999	4	4	-----	-----	-----	-----	-----	-----	-----	-----	-----
\$250,000 - \$499,999	1	1	1,238,000	1,155,196	468	441	27	-----	-----	429,488	88,720
Unclassified	2	2	-----	-----	-----	-----	-----	-----	-----	-----	-----

<sup>1</sup> For definition of the industry see tables 164 and 166, footnote 1. Reports classified by value of products represent a single quarry or mine, or a single quarry and a single preparation plant reported together. Statistics shown for "Unclassified" represent reports for more than one quarry, mine, or preparation plant.

TABLE 175.—SELECTED STATISTICS FOR CRUSHED AND BROKEN MISCELLANEOUS-STONE OPERATIONS IN THE UNITED STATES, CLASSIFIED BY QUANTITY OF STONE PRODUCED AND BY STATE: 1939<sup>1</sup>

STATE AND TONS (2,000 POUNDS) OF MISCELLANEOUS STONE	Number of quarries and mines	Number of preparation plants	Production of miscellaneous stone (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED					Wages	Salaries
					Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members			
								Total	Performing manual labor		
United States, total	61	52	2,636,776	\$2,527,948	967	858	79	30	17	\$800,183	\$189,619
1 - 999	1	-----	15,132	34,881	32	23	5	4	3	14,945	5,093
1,000 - 4,999	5	3	85,415	116,310	69	62	2	5	-----	38,727	1,550
5,000 - 9,999	9	8	85,060	361,905	109	96	9	4	3	92,700	18,440
10,000 - 14,999	7	7	159,107	211,116	122	109	11	2	-----	71,397	12,733
15,000 - 24,999	8	7	251,798	146,123	48	38	8	1	-----	39,655	16,513
25,000 - 49,999	6	4	583,202	427,554	86	73	11	2	-----	90,849	28,127
50,000 - 99,999	8	8	-----	-----	-----	-----	-----	-----	-----	-----	-----
100,000 - 199,999	3	3	1,199,834	878,609	363	362	19	2	2	342,711	66,980
200,000 - 499,999	1	1	-----	-----	-----	-----	-----	-----	-----	-----	-----
500,000 and over	1	1	-----	-----	-----	-----	-----	-----	-----	-----	-----
Unclassified	12	10	282,228	351,450	118	94	14	10	9	109,229	42,190
California, total	16	11	861,493	470,809	105	81	13	11	7	101,984	33,430
1 - 999	1	-----	199,018	92,557	30	26	2	2	-----	26,731	3,690
15,000 - 24,999	1	1	-----	-----	-----	-----	-----	-----	-----	-----	-----
25,000 - 49,999	4	2	-----	-----	-----	-----	-----	-----	-----	-----	-----
50,000 - 99,999	5	5	580,134	251,345	35	24	8	3	2	44,515	23,347
200,000 - 499,999	1	1	-----	-----	-----	-----	-----	-----	-----	-----	-----
Unclassified	4	2	82,341	126,907	40	31	3	6	5	30,738	6,185
Pennsylvania, total	8	7	140,821	346,242	114	99	12	3	1	93,468	16,553
5,000 - 9,999	2	1	41,394	214,248	61	54	6	1	1	52,087	10,800
10,000 - 14,999	2	2	-----	-----	-----	-----	-----	-----	-----	-----	-----
15,000 - 24,999	2	2	-----	-----	-----	-----	-----	-----	-----	-----	-----
50,000 - 99,999	1	1	99,427	131,994	53	45	6	2	-----	41,581	5,753
Unclassified	1	1	-----	-----	-----	-----	-----	-----	-----	-----	-----
Other States, total	37	34	1,634,462	1,710,897	748	678	54	16	9	604,751	139,655
1,000 - 4,999	5	3	61,240	121,904	84	69	6	9	3	38,965	5,433
5,000 - 9,999	7	7	-----	-----	-----	-----	-----	-----	-----	-----	-----
10,000 - 14,999	5	5	156,212	321,314	145	130	12	3	2	99,533	17,200
15,000 - 24,999	5	4	-----	-----	-----	-----	-----	-----	-----	-----	-----
25,000 - 49,999	2	2	247,788	227,082	73	65	8	-----	-----	59,577	16,617
50,000 - 99,999	2	2	-----	-----	-----	-----	-----	-----	-----	-----	-----
100,000 - 199,999	3	3	-----	-----	-----	-----	-----	-----	-----	-----	-----
200,000 and over	1	1	1,169,222	1,040,587	446	414	28	4	4	406,656	100,385
Unclassified	7	7	-----	-----	-----	-----	-----	-----	-----	-----	-----

<sup>1</sup> For definition of the industry see tables 164 and 166, footnote 1. Reports classified by quantity of miscellaneous stone produced represent a single quarry or mine or a single quarry or mine and a single preparation plant reported together. Statistics shown for "Unclassified" represent reports for more than one quarry, mine, or preparation plant and reports on which figures were not adequately reported for classification.

MISCELLANEOUS STONE

TABLE 176.—SELECTED STATISTICS FOR CRUSHED AND BROKEN MISCELLANEOUS-STONE OPERATIONS IN THE UNITED STATES, CLASSIFIED BY NUMBER OF WAGE EARNERS AND BY STATE: 1939<sup>1</sup>

STATE AND NUMBER OF WAGE EARNERS	Number of quarries and mines	Number of preparation plants	Production of miscellaneous stone (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED					Wages	Salaries
					Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members			
								Total	Performing manual labor		
United States, total	61	52	2,636,776	\$2,527,948	967	858	79	30	17	\$800,183	\$169,618
1 - 5	19	15	695,285	565,065	79	54	13	12	8	70,523	25,469
6 - 20	31	27	678,209	877,903	375	322	37	16	9	266,240	71,189
21 - 50	2	2	992,696	1,023,117	421	397	24	-----	-----	375,923	76,580
51 - 100	2	2									
101 - 250	1	1	275,378	261,863	92	85	5	2	-----	87,497	16,400
Unclassified	6	5									
California, total	16	11	861,493	470,809	105	81	13	11	7	101,984	33,430
1 - 5	9	6	638,310	276,529	40	26	9	5	2	45,100	23,056
6 - 20	6	5									
Unclassified	1	-----	225,183	194,280	65	55	4	6	5	56,884	10,394
Other States, total	45	41	1,775,283	2,057,139	862	777	66	19	10	698,199	156,188
1 - 5	10	9	507,585	775,619	352	298	37	17	10	237,086	65,208
6 - 20	25	22									
21 - 50	2	2	1,287,698	1,281,520	510	479	29	2	-----	461,113	92,680
51 - 100	2	2									
101 - 250	1	1	-----	-----	-----	-----	-----	-----	-----	-----	-----
Unclassified	5	5									

<sup>1</sup>For definition of the industry see tables 164 and 166, footnote 1. Reports classified by average number of wage earners employed during the year represent a single quarry or mine, or a single quarry or mine and a single preparation plant reported together. Statistics shown for "Unclassified" represent reports for more than one quarry, mine, or preparation plant and reports on which number of wage earners, by month, was not adequately reported.

TABLE 177.—SELECTED STATISTICS FOR CRUSHED AND BROKEN MISCELLANEOUS-STONE OPERATIONS IN THE UNITED STATES, CLASSIFIED BY NUMBER OF HOURS PER WAGE EARNER IN THE FULL-TIME WORKWEEK, AND BY STATE: 1939<sup>1</sup>

STATE AND HOURS PER WEEK	Number of quarries and mines	Number of preparation plants	Production of miscellaneous stone (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED					Wages	Salaries
					Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members			
								Total	Performing manual labor		
United States, total	61	52	2,636,776	\$2,527,948	967	858	79	30	17	\$800,183	\$169,618
40	18	15	1,105,000	1,144,047	470	435	30	5	2	417,210	91,730
43 - 44	11	8									
45 - 47	2	2	635,417	698,716	207	180	21	6	5	183,744	38,076
48	9	8	454,626	211,763	79	58	15	6	4	61,574	36,548
49 - 53	3	3									
54 - 59	1	1	54,813	88,477	49	44	1	4	3	37,112	293
Unclassified	17	15	389,120	386,925	162	141	12	9	3	100,543	22,971
California, total	16	11	861,493	470,809	105	81	13	11	7	101,984	33,430
40	2	1	351,107	286,004	41	36	4	1	-----	51,533	10,696
43 - 44	4	3									
48	4	3	412,328	107,879	34	22	6	6	5	30,128	17,769
54 - 59	1	1									
Unclassified	5	3	118,058	76,926	30	23	3	4	2	20,323	4,966
Pennsylvania, total	8	7	140,821	346,242	114	99	12	3	1	93,468	16,553
40	5	4	140,821	346,242	114	99	12	3	1	93,468	16,553
43 - 44	1	1									
45 - 47	1	1	-----	-----	-----	-----	-----	-----	-----	-----	-----
49 - 53	1	1									
Other States, total	37	34	1,634,482	1,710,897	748	678	54	16	9	604,731	139,635
40	11	10	913,997	812,808	385	361	21	3	2	339,541	77,550
43 - 44	6	4	269,111	288,793	109	100	5	4	4	71,185	9,180
45 - 47	1	1	180,292	319,497	122	99	19	4	2	113,785	34,900
48	5	5									
49 - 53	2	2	271,062	309,999	132	118	9	5	1	80,220	18,005
Unclassified	12	12									

<sup>1</sup>For definition of the industry see tables 164 and 166, footnote 1. Reports were classified by number of hours in the full-time workweek reported for wage earners in that department of the operation for which the largest number of man-hours worked was reported. Statistics shown for "Unclassified" represent reports on which number of hours was not reported.

## MINERAL INDUSTRIES

TABLE 178.—SELECTED STATISTICS FOR CRUSHED AND BROKEN MISCELLANEOUS-STONE OPERATIONS IN THE UNITED STATES, CLASSIFIED by number of days active during the year: 1939<sup>1</sup>

NUMBER OF DAYS ACTIVE DURING YEAR	Number of quarries and mines	Number of preparation plants	Production of miscellaneous stones (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED					Wages	Salaries
					Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members			
								Total	Performing manual labor		
United States, total-----	61	52	2,636,776	\$2,527,948	967	858	79	30	17	\$800,183	\$189,618
1 - 49-----	2	2	125,844	115,632	49	39	7	3	2	30,256	12,417
50 - 99-----	4	4	88,082	57,400	23	20	1	2	-----	20,062	3,077
100 - 149-----	3	3	328,414	403,553	128	113	12	3	2	125,988	48,850
150 - 199-----	5	5	258,352	288,319	112	101	8	3	1	75,682	19,800
200 - 224-----	6	6	145,989	297,725	99	86	12	1	-----	77,767	16,956
225 - 249-----	7	6	153,074	102,063	54	30	2	2	1	25,339	3,100
250 - 274-----	5	2	98,872	140,762	54	46	4	2	1	48,969	8,199
275 - 299-----	4	2	1,145,578	788,340	329	299	23	7	6	290,661	48,168
300 - 324-----	9	8	517,571	354,132	139	122	10	7	4	105,319	29,071
325 and over-----	1	1									
Unclassified-----	11	10									

<sup>1</sup>For definition of the industry see tables 164 and 166, footnote 1. Reports classified by number of days active represent a single quarry or mine, or a single quarry or mine and a single preparation plant reported together; such reports were classified by number of days the quarry or mine was in operation for production or development purposes during the year. Statistics shown for "Unclassified" represent reports for more than one quarry or mine or preparation plant and reports on which number of days active was not reported.

TABLE 179.—SELECTED STATISTICS FOR CRUSHED AND BROKEN MISCELLANEOUS-STONE OPERATIONS IN THE UNITED STATES, CLASSIFIED BY OUTPUT PER MAN-HOUR AND BY STATE: 1939<sup>1</sup>

STATE AND TONS (2,000 POUNDS) OF STONES PER MAN-HOUR	Number of quarries and mines	Number of preparation plants	Production of miscellaneous stone (tons of 2,000 pounds)	Value of all products	NUMBER OF PERSONS ENGAGED					Wages	Salaries
					Total	Wage earners (average for the year)	Salaried employees	Proprietors and firm members			
								Total	Performing manual labor		
United States, total-----	61	52	2,636,776	\$2,527,948	967	858	79	30	17	\$800,183	\$189,618
Less than 0.20-----	3	2	15,820	187,158	61	51	7	3	2	45,489	12,800
0.20 - 0.39-----	4	2	86,578	242,528	109	96	9	4	1	76,758	12,683
0.40 - 0.59-----	5	4									
0.60 - 0.79-----	4	4	585,126	431,936	251	245	6	-----	-----	199,896	9,943
0.80 - 0.99-----	1	1									
1.00 - 1.49-----	5	5	179,310	229,080	78	62	15	1	-----	82,158	22,300
1.50 - 1.99-----	5	5	201,069	160,582	59	50	7	2	1	59,095	21,917
2.00 - 2.49-----	3	3	335,364	278,232	104	97	5	2	-----	68,706	8,878
2.50 - 2.99-----	2	2									
3.00 - 6.99-----	4	4	280,789	204,706	27	25	2	-----	-----	35,643	6,077
7.00 and over-----	5	3	304,671	108,516	23	14	7	2	-----	24,129	18,470
Unclassified-----	20	17	668,049	685,430	255	218	21	16	13	208,309	76,750
California, total-----	16	11	861,493	470,809	105	81	13	11	7	101,984	33,430
2.00 - 2.49-----	1	1									
2.50 - 2.99-----	1	1	255,072	199,101	36	32	3	1	-----	41,535	8,775
3.00 - 6.99-----	3	3									
7.00 and over-----	5	3	304,671	108,516	23	14	7	2	-----	24,129	18,470
Unclassified-----	6	3	301,750	183,192	46	35	3	8	7	36,320	6,185
Pennsylvania, total-----	8	7	140,821	346,242	114	99	12	3	1	93,468	16,553
Less than 0.20-----	1	1									
0.40 - 0.59-----	1	1	46,627	230,443	71	64	7	-----	-----	61,186	11,093
0.60 - 0.79-----	2	2									
1.00 - 1.49-----	1	1									
2.50 - 2.99-----	1	1	94,194	115,799	43	35	5	3	1	32,282	5,460
Unclassified-----	2	2									
Other States, total-----	37	34	1,634,462	1,710,897	748	678	54	16	9	604,731	139,635
Less than 0.20-----	2	1									
0.20 - 0.39-----	4	2	37,702	158,372	76	65	7	4	2	45,907	11,005
0.40 - 0.59-----	4	4									
0.60 - 0.79-----	2	2									
0.80 - 0.99-----	1	1	763,505	684,767	338	314	21	3	1	290,591	33,350
1.00 - 1.49-----	4	4									
1.50 - 1.99-----	5	5	201,069	160,582	59	50	7	2	1	59,095	21,917
2.00 - 2.49-----	2	2									
3.00 - 6.99-----	1	1	632,186	707,376	275	249	19	7	5	209,138	73,365
Unclassified-----	12	12									

<sup>1</sup>For definition of the industry see tables 164 and 166, footnote 1. Reports classified by output per man-hour represent a single quarry or mine or a single quarry or mine and a single preparation plant reported together. Statistics shown for "Unclassified" represent reports for more than one quarry, mine, or preparation plant, and reports on which statistics were not adequately reported for classification.